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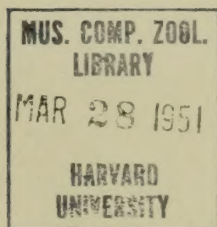
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BRITISH BIRDS

VOL. II

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Golden Eagle, with its prey.

BRITISH BIRDS

WRITTEN AND ILLUSTRATED BY
A. THORBURN, F.Z.S.

WITH EIGHTY PLATES IN COLOUR, SHOWING OVER
FOUR HUNDRED SPECIES

IN FOUR VOLUMES
VOL. II

LONGMANS, GREEN AND CO.

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v. 2

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BRITISH BIRDS

Order PASSERES.

FAMILY CORVIDÆ.

THE CARRION-CROW.

Corvus corone, Linnæus.

PLATE 21.

The Carrion-Crow is resident and not uncommon in many parts of England and Wales, and although a shy and wary bird, it is known to inhabit the London parks. Roughly speaking, from the Borders to the central portions of Scotland, this crow is still plentiful, while it occurs along the eastern side as far as Sutherland, but it is either rare or altogether absent in the northern and north-western parts, where its place is taken by the Hooded Crow. In Ireland it is seldom found.

According to the new "List of British Birds" published by The British Ornithologists' Union (2nd ed. 1915), the latest and most authoritative work on the subject, to which I am indebted for much information, "the typical form of the Carrion-Crow breeds commonly in western Europe as far east as the Elbe, in Switzerland, Bohemia, the highlands of Austria and upper Italy. It occurs occasionally in other parts of Europe." Its range extends eastwards to western Siberia, where Seebohm found it interbreeding with the Hooded Crow.

Breeding later in the year than the Rook or Raven, the Carrion-Crow has its nest completed by the end of April, either building a new one or returning to its home of former years. This is usually placed in a tree or on some ledge of rock, and is built of sticks and warmly lined with moss, wool, feathers, and hair. When the nest has been occupied for several years in succession, it becomes large and bulky owing to the frequent addition of materials. The eggs, varying in number from four to six, have the ground colour of a pale bluish-green, spotted and blotched with umber- or olive-brown and shades of purplish-grey.

Like the rest of its family, the Carrion-Crow will eat almost any food which comes to hand, and devours great numbers of the eggs and young of other birds, sometimes also attacking and killing leverets and even newly-born lambs when it gets the opportunity. It keenly searches the sea-shore for mussels and other shell-fish, of which it is extremely fond, and in order to open these easily will rise to some height and drop its booty on a stone or rock, thus fracturing the shell. The ordinary cry of the Carrion-Crow is a harsh grating croak, varying in tone, but not so deep as the Raven's nor so soft as the Rook's.

In its habits this bird is more or less solitary, scouring the countryside in search of food, generally in pairs, as it probably mates for life. At times, however, when food is abundant in any particular locality, or when their numbers are not kept down, Carrion-Crows will collect in flocks. The sexes do not differ in plumage.

THE HOODED CROW.

Corvus cornix, Linnæus.

PLATE 21.

This species, also known as the Grey or Royston Crow, is a common autumn and winter visitant to England, being more numerous in the eastern counties, where it may be seen from September to April; although its wanderings extend to many inland districts in England, it is but seldom found in Wales. There is little doubt that these winter visitors to our shores come from Northern Europe. In Scotland the Hooded Crow is a resident, being plentiful all along the western coast and islands, as well as in the northern districts, while it is not uncommon among the deer-forests of the central Highlands. It also nests in the Isle of Man. In Ireland this species is plentiful and remains throughout the year. Abroad it is found over a great part of Europe, principally in the northern and eastern portions, ranging through Siberia to the Yenesei, and either this or a closely related race is resident in some of the Mediterranean islands, Egypt, and Palestine.

The nest, constructed of the same materials as that of the Carrion-Crow, is built in a tree or on a rocky cliff, while the colour and markings of the four or five eggs are exactly like those of the latter bird. According to Professor Newton (Yarrell's *British Birds*) the two species only differ in their colour, their habits, voice, and nidification being precisely alike, but Lord Lilford and other authorities have noted a distinct difference in their cries. There is no question, as mentioned before in the article on the Carrion-Crow, that in places where the two species overlap they interbreed, and hybrids in intermediate states of plumage have often been obtained.

The Hooded Crow, like its congeners, lives on eggs, young or wounded birds, carrion of all kinds, and on the deer-forests feeds largely on the offal left on the hill or in the burns after a stag has been killed. It haunts the sea-shore to obtain any dead fish left by the tide, and may often be seen there stalking about in its sedate manner, in company with gulls and other shore birds, occasionally giving a little quick sidelong hop when any titbit attracts its notice. It has the habit, in common with the Carrion-Crow, of getting at the contents of the larger shell-fish by rising to a height and dropping them on a stone. Owing to its marauding habits it is trapped, shot, and destroyed on every possible occasion by gamekeepers and others; nevertheless it seems able to hold its own.

The colours of the male and female are alike.



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THE ROOK.

Corvus frugilegus, Linnæus.

PLATE 21.

This bird, the best known and most abundant of the Crow family in the British Islands, is widely distributed, being less plentiful in the northern parts of Scotland, although found nesting as far north as the Orkneys, as well as on some of the Outer Hebrides and islands off the west coast of Ireland. Its breeding range extends over the greater part of Europe, from Scandinavia and northern Russia as far south as Biarritz in France and Modena in Italy, and eastwards to the Crimea. After the nesting season a certain migratory movement takes place among our home-bred birds, some apparently crossing to the Continent; while birds in the northern portion of Europe migrate southwards as winter approaches as far as the Mediterranean countries. Many of these migrants come over to winter with us, leaving our shores again in March and April for Scandinavia.

The Rook is peculiarly regular in its habits, returning year after year early in February to its old familiar haunts, although the nests are not usually completed until the middle of March. The favourite site for a rookery is among the topmost branches of tall elms or other trees in parks, or in the neighbourhood of cultivated ground, but other situations are often chosen, even in the midst of large towns.

As the season advances the rookery becomes a noisy and busy scene and the birds have no scruples in robbing an unguarded nest of its building material, causing in consequence much uproar and disturbance.

The bulky nest is composed of sticks and twigs, either dead or gathered fresh from the trees, and lined with fine roots, straws, grass, and sometimes wool. It contains five or six eggs, in ground colour pale greenish-blue, blotched and marked with greenish-brown.

The familiar caw of the Rook is known to everyone, and while pairing and nest building is in progress the babel of various cries and murmurings

BRITISH BIRDS

is continuous and incessant, yet to those who have become accustomed to the sound, and from association, it is most pleasing.

The Rook is more or less omnivorous, worms, grubs, and insects being its staple diet, while it has gained the reputation of being an inveterate egg-stealer when opportunity offers, especially in times of drought, which cause a scarcity of worms and larvæ. It also causes a good deal of harm owing to its partiality for seed-corn and potatoes, but no doubt some of the damage done is compensated for by the quantity of insect pests destroyed, and it is an open question whether the Rook is beneficial to the agriculturist or not.

Although always, comparatively speaking, at our doors and affording many opportunities of studying its ways, the Rook has many unexplained habits and customs: sometimes a large flock will perform curious aerial evolutions, which I have heard described as "weaving," the individuals crossing and recrossing each other's tracks while circling at a great height in the air.

Young Rooks, up to the time of their second moult, have the base of the bill sheathed with bristly feathers, similar to those on the bills of the adult Carrion and Hooded Crows.

On reaching maturity, however, these feathers in the Rook are either shed or worn off by abrasion, caused by the bird's habit of digging in the soil for its food, leaving bare a large portion of the skin around the base of the bill, which forms a ready means of distinguishing the adult Rook from its congeners. The male and female are alike in colour.



Sky-Lark
 Shore-Lark
 Golden Lark

Wood Lark
 Short-chested Lark
 White-winged Lark
 Black Lark (Summer & Winter)

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FAMILY ALAUDIDÆ.

THE SKY-LARK.

Alauda arvensis, Linnæus.

PLATE 22.

Hardly any bird is better known, or so famed in poetry and song, and few more widely distributed through the length and breadth of our land, than the Sky-Lark. Countless numbers arrive on our shores during the autumn and winter months from Northern and Central Europe, while at the same time many of our home-bred birds, as well as immigrants, leave us during the cold season, moving southwards and westwards.

The Sky-Lark is found breeding all over Europe, but the race which inhabits southern Italy, South-eastern Europe, and the Mediterranean islands is said to be slightly different to the typical form. About the end of February or beginning of March the flocks break up and pairing begins, although they do not usually commence their nesting duties until the middle of April.

The nest is always placed on the ground, frequently in a slight depression in the soil concealed by a tuft of herbage on some grassy upland, or perhaps more often among growing corn, which affords a safe retreat. It is composed of dead grasses, with a lining of finer fibres, and contains four or five eggs, occasionally only three; in ground colour greyish, with closely distributed olive-brown freckles and markings. Two broods are reared in the season, most of the young birds leaving the neighbourhood as soon as they are able to do for themselves. The food consists of the seeds of weeds and other plants, as well as greenstuff, insects, and small worms; in time of snow they are often hard pressed for nourishment.

The most striking act in the life history of the Sky-Lark is his wonderful song, made even more effective by the manner in which it is delivered. This joyous and "heart-lifting" lay fills the air as the bird ascends higher and higher till almost out of sight, "melting in the flood of light," and is continued while he floats downwards, head to wind, when he ceases and drops like a stone.

BRITISH BIRDS

The song does not last for many minutes at a time, often for only two or three, and may sometimes be heard while the bird is perched on a post or bush or even on the ground.

When feeding Larks run swiftly and nimbly among the herbage, not hopping like so many other small birds, and their long rather straight hind claw is well adapted to assist them in passing over the grass. They have a characteristic habit of standing erect, with raised crest, as shown in the plate, and on other occasions will crouch, when they are easily overlooked owing to their colour harmonising so well with the ground.

When migrating Sky-Larks appear to be very much attracted by any brilliant light, and great numbers out of the countless migratory flocks are lost at the lighthouses on our coasts.

On one occasion when I was working at night close to a lighted window, a Lark arrived out of the darkness and fluttered against the glass, until it was opened, when the bird entered the room. This habit has been taken advantage of by the invention of an unsportsman-like appliance, known as a lark-glass, which, attracting the birds, allowed them to be easily shot by a gunner stationed near.

Sky-Larks are fond of dusting their plumage, and also of bathing. The sexes are alike in colour.

THE WOOD-LARK.

Alanda arborea, Linnæus.

PLATE 22.

This species, easily distinguished from the Sky-Lark by its smaller size, shorter tail, and more strongly marked light-coloured eye-streak, is local in its distribution, and much less plentiful than the other.

It has been noticed chiefly in the southern and south-eastern districts of England, being rare in the middle and northern parts, while it is only locally distributed in Wales, and rarely seen either in Scotland or Ireland.

It is said to have decreased in numbers of late years, and is now unknown in some of its former haunts.

Throughout Europe it is found from the central parts of Scandinavia as far south as the Mediterranean and eastwards to the Ural Mountains.

According to Professor Newton in his edition of Yarrell's *British Birds*, the Wood-Lark breeds early in the year, sometimes about the middle of March.

The nest is placed in a slight hollow on the ground, concealed by a grass tuft or small shrub, and is made of bents with some moss, and lined with finer grasses; the materials being more firmly compacted together than in the nest of the Sky-Lark. The four or five eggs are pale yellowish- or greenish-white, spotted and marked with reddish-brown and violet-grey, while sometimes the markings blend into each other, forming a zone at the larger end.

This species is more insectivorous than the Sky-Lark; in summer grasshoppers form a considerable part of its food, but seeds are eaten during the winter months, at which time the birds may be seen in small flocks, and have a habit of squatting close to the ground in order to escape observation.

The Wood-Lark is one of our finest songsters, its flute-like notes being sweet and melodious, sometimes given as the bird perches on a branch, at others delivered while it circles or hovers in the air. Its favourite haunts are among the uncultivated parts of the country, and although not actually inhabiting woods, it is seldom found far from trees, and is partial to open spaces skirted by plantations in dry and sandy situations.

The sexes do not differ in colour.

THE CRESTED LARK.

Alauda cristata, Linnæus.

PLATE 22.

Although fairly common as near our shores as the north of France, as well as in Holland and Belgium, the Crested Lark is only a rare straggler to England, the latest occurrence I have heard of being one seen this summer (1915) by Mr. J. G. Millais near Horsham. Subject to variations both in form and colour, this bird is found in suitable localities throughout Europe, as well as in North Africa and Asia.

The nest is generally placed on the ground, the slight depression caused by a hoof-print being often made use of, but Naumann says it is occasionally built on an old earth wall or among the thatch of a shed in the fields. It much resembles the Sky-Lark's, and contains four or five eggs, pale yellowish or greenish-white, spotted with olive-brown and violet-grey.

Its food is also like that of other Larks.

The soft pleasant song is delivered either from the ground or in the air.

It is a very tame and confiding bird, often frequenting the neighbourhood of villages and showing little fear of man, and when dusting itself on sandy ground or roads it will, if disturbed, merely fly a short distance and then alight. The female differs little from the male, being only slightly smaller.

THE SHORT-TOED LARK.

Alanda brachydactyla, Leisler.

PLATE 22.

This little Lark has occurred about a dozen times in England, and has also been obtained on five occasions on Scottish islands, viz. Fair Isle, the Orkneys, and Outer Hebrides, and once in Ireland. It is common as a breeding species in Southern Europe, especially in the open tracts of uncultivated and sandy country of central and southern Spain, and also in North Africa, as well as Asia.

The nest is situated in a hollow or hoof-mark in the sand, or under the shelter of a clod in fallow land, and is slightly constructed of grass-bents with a lining of hair, and sometimes two or three feathers. The eggs, usually four or five, are white, thickly freckled with ashen-brown.

The Short-toed Lark lives principally on seeds, and has a pleasing but somewhat feeble song, uttered sometimes while the bird is soaring aloft, sometimes on the ground. There is no difference in the colours of the sexes.

THE WHITE-WINGED LARK.

Alauda sibirica, J. F. Gmelin.

PLATE 22.

The first occurrence of this Eastern species noted in England was a bird caught alive near Brighton in November 1869, which had been consorting with some Snow-Buntings. Since that date five others have been obtained in Kent and Sussex. It breeds among the steppes of southern Russia, where it is quite common, and also in Asia from Turkestan to Siberia, migrating southwards and westwards in autumn.

The nest, usually begun in May, is built like those of its congeners on the ground in some small depression, sheltered by a grass tuft or bush. The eggs vary in number from three to five, and in colour are yellowish-white, with markings of dull brown and lilac-grey.

Little is known of its habits, and I can find no information about its food, which probably is similar to the other Larks'. It frequents open country, and according to Pallas is often to be seen by roadsides, where it sings while fluttering in the air after the manner of the Sky-Lark, but with a shorter and somewhat different strain.

The female is duller in colour than her mate, and lacks the bright rufous tints on the head and other parts.

THE BLACK LARK.

Alauda yeltoniensis, Forster.

PLATE 22.

A small flock of this large-billed and very striking species visited the borders of Sussex and Kent in January 1907, of which four were obtained, the last being shot on 18th February of that year. Previous to their arrival the weather had been very cold and stormy. The Black Lark lives among the steppes of southern Russia, and east of the Caspian Sea as far as the Yenesei, wandering occasionally in winter to Europe.

The nest is loosely constructed and placed on the ground. It contains four or five eggs, in colour white, mottled with umber-brown and grey.

Its food consists of seeds, especially those of the salt-flavoured plants of the steppes, and in time of snow, when pressed for nutriment, it frequents roads in company with flocks of other species.

Its song is said to resemble the Sky-Lark's, and like the Shore-Lark it leads a wandering life in winter, but little is known of its habits.

The female during summer has the upper-parts light buffish-brown, with darker markings of brown, is rufous on the lower part of the back, while some of the primaries and tail feathers are edged with white. In winter the general colour is more bleached and hoary.

THE SHORE-LARK.

Otocorys alpestris (Linnæus).

PLATE 22.

The Shore-Lark has long been known as a winter visitor to our islands, the first having been obtained in March 1830 on the Norfolk coast. Of late years, during the months between autumn and spring, its visitations have greatly increased, and may now be considered as annual along the east coast and as far north as Fair Isle, Shetlands. It has never been recorded in the west, and only once in Ireland.

During winter the Shore-Lark seems to lead a wandering life, and in summer is found over a great part of Northern Europe, mainly beyond the Arctic Circle, and also in Northern Asia and America.

The nest is invariably built on the ground, usually in some slight depression or among stones, being lightly made of grass and bents, and lined inside with the hair of the reindeer or with willow-down. The number of eggs varies from three to five, and their colour is pale greenish-white, closely and irregularly marked with dull brown; occasionally the markings form a zone at the larger end.

The Shore-Lark breeds twice yearly, the broods afterwards forming flocks. Its food consists of seeds and insects, and its song, though brief, is full of melody, the birds singing in the air as well as on the ground. It is not shy and may be seen about the villages and towns of Northern Europe.

The female is rather smaller, has less black on the head, and is duller in colour than the male.



Red-necked Nightjar Needle-tailed Swift Egyptian Nightjar
 Red-necked Nightjar Egyptian Nightjar

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Order PICARIÆ.

FAMILY CYPSELIDÆ

THE SWIFT.

Cypselus apus (Linnæus).

PLATE 23.

This summer visitant to our islands often arrives in the south of England at the end of April, at which time I have seen it in the Isle of Wight, but in Surrey the date of its coming is usually early in May. It leaves us rather suddenly and mysteriously about the middle of August or a little later, without the noticeable gatherings so often displayed by the Swallows and Martins before taking their departure. There are few parts of the country where it is not more or less plentiful, except in some portions of northern and western Scotland. It is widely spread over Europe during the summer, as far north as Scandinavia and Russia, while in winter it retires to Africa and Madagascar.

It haunts the neighbourhood of towns and villages, the nest being placed in some recess or crevice in the darkness beneath the thatch or tiles of cottages and houses, under the beams on the roofs of churches, and sometimes in crannies in the rocky faces of cliffs; a very small opening is sufficient for the entry of the bird, which can squeeze itself through a tiny crevice; according to Gilbert White they even turn their bodies edgeways to effect their purpose. For the construction of the nest the bird collects some straws, grass, wool, or feathers, gathered while on the wing, and glues these together with a glutinous secretion from the salivary glands. The two white eggs are rather rough in texture and elongated in form; they are usually laid at the end of May or beginning of June, and unless some accident happens no second brood is reared in the season, while birds have been known to abandon their young rather than delay their departure.

The shrill ringing scream of the Swift is a familiar summer sound, as the birds dash in their wild career, the clamour varying in intensity as they wheel

BRITISH BIRDS

round and about the steeples and buildings: they show a marvellous power in guiding and controlling their flight, at times moving with rapid beats of their wings, then again gliding in long sweeps and curves. Their energy appears to be untiring, and they do not seem in any way affected by heavy rain.

During the long days they are capable of remaining on the wing from early morning till dark, and towards evening, when the young are able to look after themselves, the birds may be seen circling at an incredible height; whether for recreation or after their food, which consists entirely of insects, it would be difficult to say.

It has been stated and is a common belief that owing to its great length of wing the Swift is unable to rise from a flat surface, but this has been proved to have no foundation in fact, from the observation of competent authorities. When they first arrive, Swifts are in the perfection of plumage, with a beautiful gloss on their feathers, but before they leave us they become faded and bleached. The sexes are alike in colour.

The Swifts have now been entirely separated by naturalists from the Swallows and Martins, as it has been proved that they have no relation whatever to these birds.

The foot of the Swift is of peculiar construction, having the four toes, which are short and strong, all directed forwards, and the tarsus very short and feathered in front. This formation enables the bird to cling with great ease to the rough surface of a wall or rock when alighting at the nest.

THE ALPINE SWIFT.

Cypselus melba (Linnæus).

PLATE 23.

The Alpine or white-bellied Swift was unknown in the British Islands until the summer of 1829, when the first example was obtained off the Irish coast. Some twenty-five others have since occurred in England, one in Wales, and three in Ireland.

This species is a summer visitor to the mountainous districts of Central and Southern Europe and North Africa, migrating in autumn to South Africa and Ceylon. It also breeds eastwards as far as the Himalayas.

The Alpine Swift builds its semi-circular nest within some cranny or recess in inaccessible rock faces or in the walls of lofty buildings, the old cathedral tower at Berne before it was removed having been one of their breeding stations. The nest is composed of straws, grasses, feathers, and other materials, gathered on the wing, the mass being united by saliva. The dull white eggs are generally two in number.

The cry of this Swift is loud and more powerful than that of our common bird, and its food is the same, consisting entirely of insects. Its powers of flight are even more striking, as it dashes and wheels at lightning speed, while it is easily distinguished on the wing by its large size and white underparts. There is no variation in the colour of the sexes, but in the young the feathers are edged with dull white.

THE NEEDLE-TAILED SWIFT.

Acanthyllis caudacuta (Latham).

PLATE 23.

This bird, an extremely rare straggler from Eastern Asia and Australia, has only twice been obtained in England, and has never hitherto been seen in Europe. The first was shot at Great Horkesley, near Colchester, in July 1846, and the other near Ringwood, Hampshire, in July 1879, the last having had a companion which was not secured. The breeding range of this large and long-winged Swift extends from eastern Siberia southwards through Saghalien, Manchuria, Mongolia, and Japan, while the bird spends the winter in Australia and Tasmania.

General Prjevalsky found these birds breeding in river cliffs and in hollow trees, several pairs generally nesting in close proximity; their notes are said to be weak, more like a Swallow's than the common Swift's. The eggs are white, and the bird subsists entirely on insects. The male and female are alike in colour.

FAMILY CAPRIMULGIDÆ.

THE NIGHTJAR.

Caprimulgus europæus, Linnæus.

PLATE 23.

The Nightjar, also called Fernowl and Goatsucker, and known in many country places by its old name of Puckeridge, usually arrives in England about the middle of May, though I have seen one near Hascombe, Surrey, which I put up from the shelter of some furze bushes in a disused sandpit on 29th April 1909. During summer it is widely distributed over our islands, and leaves us in September for Africa, the latest date on which I have seen it in Surrey being the 13th of that month. In Europe it ranges as far north as Scandinavia and southwards to Spain.

The Nightjar makes no nest, laying its two eggs on the ground, usually in a clearing among trees, but sometimes in the open, sheltered by furze, brambles, or bracken; the eggs, which are elongated in shape, are white, marbled and veined with different shades of brown and violet-grey. One brood only is reared in the season, and in their first downy stage, before attaining their powers of flight, the young often move a short distance from their birthplace, and are fed by their parents until after they are able to fly.

The food consists of insects, large moths and cockchafers forming a good part of it; these are caught on the wing during the hours of twilight and darkness, the wing cases and other indigestible portions being ejected in the form of pellets from the mouth.

Perched on a bare branch, the bird utters his loud and singular vibrating song, which often lasts for several minutes at a time, and has been likened to the whirr of a spinning machine. It is usually heard between twilight and dawn, but is said to have been noticed occasionally in the daytime. Often when on the wing in early summer the male gives out a sharp whistling note, and at times produces a rather loud clap by the striking together of its wings after the manner of a pigeon.

BRITISH BIRDS

During daylight the Nightjar drowzes with closed eyelids, either crouching on the ground or on the bough of a tree, usually perched so that the body of the bird is placed lengthways in a parallel line with the branch, and not across it; as far as I have been able to observe, with the head held higher than the body. It seems to delight in the warmth of the sun, and may often be seen basking and dusting on sandy footpaths or in sheltered corners, and the curiously mottled and protective colouring of the bird makes it difficult to see when at rest. When disturbed during the day, as it flops into the quietness of some shady retreat, one can form no idea of its wonderful powers of flight as displayed during the dusk of evening, when the birds are fully awake, swooping with marvellous speed in pursuit of their prey, or toying and twisting in the air and chasing one another.

The foot of this bird is extremely small, and no satisfactory reason appears to have been discovered for the curious pectinated or comb-like edge on the inner side of the middle claw, unless it be to enable the bird to sit more securely when settled along a branch.

The female resembles the male in colour, but is slightly less rufous, and is without the bold white spots on the three first quill feathers of the wing and the two outermost feathers on each side of the tail.

THE RED-NECKED NIGHTJAR.

Caprimulgus ruficollis, Temminck.

PLATE 23.

The only British example of this beautiful Nightjar was shot on 5th October 1856 at Killingworth, near Newcastle, and recorded by the late John Hancock. It is common in many parts of southern Spain and Portugal, and also in Morocco, while a paler form of the same bird occurs in Tunisia and Algeria.

Lord Lilford says, in his work on British Birds, "it is very common in most parts of Andalusia during the summer months, especially frequenting the sandy pine-woods, though by no means infrequently met with also in the scrub-grown wastes." He also states that in comparison with the common Nightjar "there is a very perceptible difference between the 'churring' notes of the two species."

Their eggs are very much alike in colour, and there is apparently very little difference in their food and habits.

The sexes are similar in the colour of their plumage, both having the white spots on the three outer primaries, and broad white tips to the two pairs of outer tail feathers.

THE EGYPTIAN NIGHTJAR.

Caprimulgus ægyptius, Lichtenstein.

PLATE 23.

The Egyptian or Isabelline Nightjar is another rare species, one example only having been obtained in England. This was shot near Mansfield, Nottinghamshire, by the gamekeeper of Mr. J. Whitaker, of Rainworth Lodge in that county, on 23rd June 1883, and is now in his collection.

This species is found in Egypt and Nubia, and across South-western Asia to Afghanistan and Baluchistan. It makes no nest, the two eggs, in ground colour a dingy yellowish- or greyish-white, with pale ashen-grey mottlings, being placed on the desert sands.

The male and female are alike in colour, and both lack the white wing and tail spots, so marked in both sexes of the Red-necked Nightjar, and also in the male of our common bird.



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THE WRYNECK.

Iynx torquilla, Linnæus.

PLATE 24.

This summer visitant to England usually arrives in the first or second week in April, the earliest date on which I have noted it in Surrey being the 4th of that month, while it takes its departure in September. Coming usually about the same time as the Cuckoo, it is often called the Cuckoo's mate, and in my neighbourhood it is known to country people as the "rinding bird," from its arrival coinciding with the time of rinding or stripping of bark from the oak.

It is not an uncommon bird in the south-eastern counties of England, but is scarcer in the west and very rare in the north, while in Scotland and Ireland it is only known as a passing migrant.

It breeds throughout the greater part of Europe, and in many of the temperate portions of Asia, retiring for the winter months to tropical Africa.

Not till some time after its arrival does the Wryneck begin its nesting operations, although it may be seen about the neighbourhood of its nesting hole as soon as it reaches this country. It returns year by year to the same spot, and generally selects some hole in a fruit or other tree in which to deposit its eggs, and if it once takes to a nesting-box will return regularly to it. I have had many opportunities of watching a pair which have taken possession of one fixed to the boarding of a shed in my garden.

They frequent the neighbouring trees for some time before the eggs are laid, and were it not for the peculiar notes of the male, which bear a strong resemblance to the cry of a Kestrel or Hobby, and are delivered as he sits stolidly on the bough of a tree, the birds might easily pass unnoticed, so quiet and unobtrusive are their actions.

No materials are gathered on which to lay the eggs; they are merely placed on the wood within the hole, although if the site has been previously occupied

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by any nest-building bird, they are laid on the top of this ready-made structure. In number the eggs vary from seven to ten, but if these be removed the bird will continue to lay, as many as forty-two having been recorded as taken from one nest by Mr. Norgate between 29th May and 13th July 1872. The eggs are pure white.

The food consists almost entirely of insects, the bird being especially fond of ants and their pupæ, hence the old Norfolk name of "Emmet eater." The curiously long and pointed tongue is beautifully adapted for this purpose, having ducts which convey a sticky secretion to the sharp and hard tip, which enables the bird to capture its prey with great ease and rapidity.

The Wryneck has a singular habit from which it takes its name, of turning and twisting its head and neck if disturbed in its nesting-hole or taken in the hand, and it will feign death when captured in order to effect its escape.

This last-mentioned ruse was noticed long ago by Sir Thomas Browne, of Norwich, who in his notes on birds found in Norfolk speaks of the Wryneck, or "Hobby bird," as he calls it, "as maruellously subiect to the vertigo." By way of repelling an intruder it will also utter a sharp hissing sound, which, coming from the darkness of its retreat, often gives the impression that a snake has sheltered therein. The young also make a similar noise when disturbed.

The female resembles the male in colour, but is slightly duller.

SUBFAMILY *PICINÆ*.

THE GREEN WOODPECKER.

Gecinns viridis (Linnæus).

PLATE 24.

The Green Woodpecker, the most common of the three species inhabiting this country, is plentiful in many of the wooded districts of the southern and midland counties of England, though scarce in the northern parts, and hardly known in Scotland or Ireland. It is found over the greater part of Europe, ranging as far north as Norway and the neighbourhood of Petrograd, while it also inhabits parts of Asia.

The nest is placed within the hollow core of a decaying branch or trunk of a tree, one of the softer-wooded kinds, such as the elm, ash, poplar, or willow, being preferred to the beech or oak. Into this a circular hole is cut by the chisel-like bill of the bird, running in a horizontal direction until the rotten wood is reached, when a cavity is dug out in which to lay the eggs. The chips of wood are thrown out at the entrance as the birds proceed with their work, the litter at the roots of the tree affording a good indication of where the nest is. The five or six eggs, which are of a beautiful shining white, are laid either on the bare floor of the hole, or on some of the chips which may not have been removed.

The food of the Green Woodpecker consists of insects of various kinds, ants and their pupæ being much sought after; on such occasions the bird may be seen hopping in a curious, ungainly manner on the ground. When searching for timber beetles and grubs in trees, it begins near the ground and works upwards, usually in a spiral course, with short quick jumps, using its tail as a support, and inserting its tongue into the cracks and openings in the bark as it ascends, while it occasionally stops to cut away a piece of bark or decayed wood which conceals some delicacy within.

The Green Woodpecker, or Yaffle as it is called in country places, on account of its loud laughing cry, which has a fine joyous ring in it, especially during the breeding season, is shy and solitary in its habits, and haunts the neighbourhood of old timber trees in parks and woods, though it may sometimes be seen in the open. When in fear or distress the bird utters piercing and discordant cries, such as I have heard when one has been chased by a Sparrow-Hawk. It is easy to distinguish the bird at a considerable distance when on the wing, as it alternately rises and falls during flight.

The female differs from the male by having less red on the head, and none on the dark patch at the base of the bill, which is entirely black.

THE GREAT SPOTTED WOODPECKER.

Dendrocopus major (Linnæus).

PLATE 24.

The Great Spotted Woodpecker, or, as it is often called, the Pied Woodpecker, is much less common than the species last described, although it is not so scarce as many people suppose, owing to its shy and retiring habits. It is widely distributed over England, where there are sufficient trees to suit its requirements, but becomes rarer in the northern counties. In Scotland it breeds as far north as Dunkeld, while it has not been known to nest in Ireland, although it has been obtained there. It is found over a considerable part of Europe, ranging as far north as Scandinavia and Russia, but these European birds which frequently migrate to our shores are said to belong to a different race.

This Woodpecker either makes for itself a nesting-hole in a tree, or occupies a ready-made cavity which is often enlarged to suit the bird's requirements, oaks being frequently selected. The five to seven eggs are either laid on the bare wood or on chips left in the hole, and are pure white in colour.

In spring the bird produces a loud jarring note, caused by the rapid tapping of the bill against a bough, which is used as a sounding-board, the strokes being delivered so rapidly as to be almost invisible. Mr. J. G. Millais informs me that he does not think this species makes the long rattle of the Lesser Spotted Woodpecker, but only a short one, while the calling note is "Pleek-Pleek-Pleek-Pleek"; it also makes a single flute-like note when flying.

This bird appears to be much less insectivorous than the Green Woodpecker, and although insects no doubt compose the bulk of its food, it undoubtedly feeds largely on nuts and berries, and I am assured by a friend in my neighbourhood that the young, after they have left the nest, have come to the green peas in his garden.

The female differs from the male in having no red on the head, while the young, as shown in the plate, has the whole crown of that colour.

THE LESSER SPOTTED WOODPECKER.

Dendrocopus minor (Linnæus).

PLATE 24.

This little bird, which should more properly be called the Barred Woodpecker, appears to be much more common than its larger relation just described, and is frequently to be heard, though not so often seen, in the southern and midland parts of England and the adjoining counties in Wales. In the north of England it becomes scarce, while it has only once occurred in Scotland, and in Ireland the records of its capture are not to be relied upon.

In Europe the Lesser Spotted Woodpecker is found as far north as Scandinavia and Russia, and ranges eastwards across parts of Siberia and Central Asia to Japan. It also inhabits North and North-west Africa.

In May the glossy white eggs are laid in its nesting-hole, which is similar, but, of course, smaller than the other species, and generally situated at a good height from the ground. They are placed on the bottom of the cavity, in which chips are sometimes left, and vary in number from five to eight.

This species is said never to eat fruit or seeds, but feeds on the insects caught on the trees it frequents.

Both sexes have a short call-note, rapidly repeated, and make besides the loud jarring sound somewhat resembling but more prolonged than the Great Spotted Woodpecker's, produced, according to Mr. J. G. Millais, by rapid hammering of the bill in a hole, which may be compared to a long-drawn guttural R. He also tells me that it utters a high-pitched note when flying.

The bird is active and restless in its habits, and usually haunts the upper branches of tall trees, especially those that are dead or decayed. In the young male the crown of the head is red, as in the adult bird, while the young female has only the front of the head of this colour.

Several other species of Woodpecker, native to foreign countries, are said to have been taken here, but the records are either unreliable or refer to escaped birds.

FAMILY **ALCEDINIDÆ.**

THE KINGFISHER.

Alcedo ispida (Linnæus).

PLATE 24.

This beautiful bird, renowned for the gem-like brightness of its plumage, is found over the greater part of the British Islands, and although well known, is not by any means common, owing to the persecution it receives on account of the value of its feathers for the dressing of artificial flies, and the demands of millinery; it is also much sought after as a subject for the taxidermist, and a good many are destroyed by the owners of fishings.

In Europe it ranges from Scandinavia and Russia to the Mediterranean.

The Kingfisher generally chooses for its nesting site a steep bank by a pond or riverside, in which by digging with its bill it excavates a tunnel with an upward slope, penetrating about two feet into the soil, although the distance varies. The entrance is narrow, but is made wider and rounded at the extremity in order to accommodate the sitting bird and nestlings.

There is no real nest, the eggs, which are glossy white and from six to eight in number, being merely laid on an unsavoury deposit of fish-bones cast up in the form of pellets by the birds. Amid these unpleasing surroundings the eggs are hatched, and as the young gain strength they come to the mouth to receive the small fish brought in rapid succession by the parents.

After leaving the nest, and before they are able to fend for themselves, the little birds form a charming picture as they sit on a bough waiting to be fed. The food consists of small fish, such as minnows, stickle-backs, and other kinds, as well as tadpoles and aquatic insects; small crustaceans are also said to be taken. The Kingfisher's mode of fishing is to remain motionless on the bough of a tree, post, or some other point of vantage, until its prey comes within reach, when with a sudden dash into the stream it is secured, carried to a branch, and speedily killed by a few sharp strokes against the perch, when with a dexterous movement it is so held as to be always swallowed head foremost. Sometimes the bird may be seen hovering over the water before darting at its prey.

The note of the Kingfisher is a shrill cry, several times repeated, and has been likened to that of our common Sandpiper.

The flight is straight and rapid, usually carried out close to the water and following the turnings of the river, though the bird will often travel some distance over ground away from any stream. During the greater part of the year it is rather a solitary bird, and suffers much during severe weather owing to its food supply being cut off by the freezing of the waters, and at such times it commonly makes its way to the sea-shore.

The sexes are alike in colour, the female being perhaps slightly duller.

FAMILY CORACIIDÆ.

THE ROLLER.

Coracias garrulus, Linnæus.

PLATE 24.

Since Sir Thomas Browne recorded the occurrence of this gaily-painted species in Norfolk, now more than two hundred and fifty years ago, a large number have reached our shores, over a hundred having been noticed, mostly in the southern and eastern counties of England, while it has also visited the Orkneys and St. Kilda, though owing to its brilliant plumage few of these visitants have escaped destruction.

During summer it is found over a great part of Europe, being plentiful in the Mediterranean countries, and in North-west Africa. It also visits western Siberia, and winters in South Africa and India.

The Roller generally selects for its nest a hole in a tree, or in some bank or cliff, but a cavity in a ruined wall is also sometimes chosen. A light fabric is put together of twigs and dead grasses, in which it lays from four to six shining white eggs, globular in shape.

It feeds chiefly on grasshoppers, beetles, and other insects captured on the ground, and, according to Lord Lilford, it occasionally takes frogs and small reptiles.

Its notes are harsh and discordant, and it is by nature a shy and wary bird, constantly flitting from branch to branch or swooping to the ground to capture its prey, and haunting more or less open country.

At times, especially during the breeding season, it performs somersaults and other curious gymnastic antics in the air, hence its name of "Roller."

It usually selects a dead bough or some isolated tree-top as a look-out station, from which it sallies after food.

There is no difference between the male and female in colour, but the immature birds are duller.

THE BEE-EATER.

Merops apiaster, Linnæus.

PLATE 25.

Some forty examples of this rare visitant to the British Islands have been obtained, one of these having occurred as far north as the Shetlands. It is plentiful in the south European countries, and is found eastwards as far as western Siberia, Afghanistan, and Kashmir.

The new B.O.U. "List of British Birds" (2nd ed. 1915) states that "occasionally it is found breeding to the north of its range as far as Silesia and has wandered to almost every part of Europe." It migrates for the winter to tropical and South Africa and India. The Bee-eater usually breeds in colonies, boring deep holes in river banks, and sometimes in open and uneven ground. Referring to the latter breeding-places, Colonel Irby says (*The Ornithology of the Straits of Gibraltar*, 2nd ed., p. 132): "The shafts to these nests are not usually so long as those in banks of rivers, which sometimes reach to a distance of eight or nine feet in all; the end is enlarged into a round sort of chamber, on the bare soil of which the usual four or five shining white eggs are placed." The same writer observed that the bills of the birds, after boring the holes, "are sometimes worn away to less than half their usual length."

The food consists of winged insects, such as bees and wasps, while its note, according to the late Howard Saunders, is "a sharp *quilp*."

The female is not so bright as the male, and has the two central tail feathers shorter.



Cuckoo, Red-shouldered Hawk, Sharp-shinned Hawk, American Yellow-billed Cuckoo, Downy Woodpecker, Red-eyed Vireo

FAMILY UPUPIDÆ.

THE HOOPOE.

Upupa epops, Linnæus.

PLATE 25.

This bird is a regular spring visitor to the southern parts of England, and were it not for the constant and senseless persecution it receives at the hands of the collector and others, would no doubt breed annually in this country. It is known to have done so on several occasions, but very few of the birds which visit us escape destruction, as they are very tame and confiding and have little fear of man.

It was evidently more often seen in former days than at present, as Sir Thomas Browne in his list of birds found in Norfolk, written some two hundred and fifty years ago, quaintly describes it as "Upupa or Hoopebird so named from its note a gallant marked bird wch I have often seen & tis not hard to shoot them."

The Hoopoe is a common species in Southern Europe, and breeds throughout the continent, ranging as far north as south Sweden, inhabiting also western Siberia and other parts of Asia, including north-western India. It usually nests in a hole in a tree, such as the ash or willow, or in a cavity in a rock or wall, the few twigs, grasses, &c., which compose the nest being set in an accumulation of ordure. From four to seven eggs are laid, of a pale greenish-blue, which soon lose their beautiful colour.

It feeds on insects, worms, and grubs, sought for among manure in pasture lands and roads. The singular and far-reaching note of the Hoopoe is a hollow-sounding whoop, repeated several times in succession.

The birds pass a good deal of their time on the ground, where they "march about in a stately manner," as Gilbert White observes, at times erecting their showy crest if alarmed or excited and when first alighting.

The female is hardly so brightly coloured as the male.

FAMILY CUCULIDÆ.

THE CUCKOO.

Cuculus canorus, Linnæus.

PLATE 25.

Looking over my notes, kept for a number of years, on the first arrival of the Cuckoo in the neighbourhood of Hascombe, Surrey, I find the earliest date is the 10th of April, the bird usually arriving shortly after that time.

Mr. J. G. Millais tells me that he saw and heard one in Warnham Park, Sussex, as early as 31st March, which he believes is the earliest authentic date known: this was recorded in *The Field* at the time.

The males, who come before the females, soon announce their presence by their well-known call, which, continuing throughout the month of May, becomes hoarse before ceasing in June. Towards the end of July or early in August the old birds disappear, the young following them later.

Soon after its arrival it spreads over the country, reaching the northern parts of Scotland shortly after the beginning of May.

During summer it visits the whole of Europe, ranging, according to the late Howard Saunders (*Manual of British Birds*, 2nd ed., p. 287), "almost to the North Cape in Norway, nearly as far north in Russia, and across Northern Asia up to lat. 67°," while in winter it migrates to South Africa, India, and other parts of Southern Asia.

Owing to the Cuckoo's strange habit of entrusting the care of its eggs and young to foster-parents of other species, it has long attained a notoriety possessed by few other birds.

As is now well known the female lays her egg on the ground, and taking it in her bill deposits it in the nest of some other bird; perhaps the most favoured are those of the Pied Wagtail, Meadow- and Tree-Pipit, Reed-Warbler, Hedge-Sparrow, and other soft-billed birds. The eggs are remarkably small for a bird of the Cuckoo's size, and vary a good deal in colour and markings, but apparently

THE CUCKOO

each female always produces eggs of the same type. These may be greenish- or reddish-grey, with close specklings of darker shades, or occasionally pale blue, and sometimes, but not always, resemble the colour of the foster-parent's eggs. Not long after being hatched, the young Cuckoo contrives to hoist its fellow-nestlings on to its back, which for the first twelve days or so has a convenient hollow, and with more or less violent efforts heaves them one by one over the edge of the nest.

The familiar song of the Cuckoo need not be described, but I have never come across any account of the curious fact that it appears to be uttered with the bill closed, as when a pigeon coos. My attention was first drawn to this by the late J. Wolf many years ago, and I have since had opportunities of verifying it. The sketch of the adult bird in the plate was taken from life with the aid of a field-glass, and shows the attitude assumed when the notes are given. The bird sits in a more or less horizontal position, with wings drooped below the tail, which is spread and slightly raised, while a swaying motion is given to the body and the throat is puffed out.

The female does not usually differ from the male in colour, but occasionally is tinged with rufous on the breast; it appears always to be less numerous than the other sex, and leads a wandering life. She has not the loud "plain song" of her mate, but utters a kind of note, which Seebohm compares to the sound of bubbling water.

THE GREAT SPOTTED CUCKOO.

Coccyzus glandarius (Linnæus).

PLATE 25.

This large Cuckoo is a very rare visitor to the British Islands, four specimens only having been recorded, viz. the first captured on Omev Island, off the Connemara coast, about 1842, the next near Bellingham, Northumberland, another on the Denes, Yarmouth, and the last seen at the Skellig Rock, county Kerry, by the lightkeeper there. The Great Spotted Cuckoo is found in South-western Europe, particularly Spain and Portugal, ranging across Asia Minor to Persia. It also inhabits North Africa, retiring in the winter to tropical and South Africa.

It is said always to place its eggs in nests belonging to the Corvidæ (Irby); the colour is pale bluish-green, spotted with reddish-brown and purplish.

Howard Saunders describes the note of the male as a harsh "*kark-kark*," and the female's as "*burroo-burroo*."

The sexes are alike in colour, but the young bird has the head and nape much darker, with tawny-buff on the throat and breast, and chestnut on part of the primaries.

THE AMERICAN YELLOW-BILLED CUCKOO.

Coccyzus americanus (Linnæus).

PLATE 25.

This species during the breeding season inhabits the temperate parts of North America, and migrates by way of the West Indies and Central America to pass the winter in South America. It has occurred about a dozen times in the British Islands.

Unlike our common Cuckoo, it makes its own nest and rears its young, although the egg has been found on rare occasions in the nests of other species. The eggs, seldom more than four in number, are pale green in colour.

Its notes, according to Macgillivray, resemble the word *cow*, repeated eight or ten times, and the sexes are alike in colour.

One example of the American Black-billed Cuckoo, *Coccyzus erythrophthalmus* (Wilson), has been recorded in our islands, this having been shot at Kilbead, county Antrim, Ireland, about 25th September 1871.

As its name implies, this species inhabits North America and Canada, migrating in the autumn to South America. It resembles the species last described in its habits and nidification, but differs in colour, having the bill entirely black, the orbits red, a more decided brown on the back, and is without the chestnut on the primaries.

Order STRIGES.

FAMILY STRIGIDÆ.

THE BARN-OWL.

Strix flammea, Linnæus.

PLATE 26.

The Barn, White, or Screech-Owl, as it is variously called, is a fairly common bird throughout the British Islands, although scarce in northern Scotland. It has a very wide geographical range in both the old and new worlds, and shows some variation in colour, the race inhabiting southern Sweden, Denmark, and Central Europe having a darker breast than our bird.

This species dislikes sunlight and therefore selects for its nesting-place some dark retreat in the walls or under the roof of old buildings, church towers, or in hollow trees, while dovecots are often chosen. For several years in succession a pair occupied a dovecot in my garden, and I noticed what they most appreciated was to have within their dwelling as little light as possible. By placing an inverted wooden box in the darkest corner, to which access was obtained by a hole in the side, the owls were induced to breed regularly, always, however, leaving their home after the young were able to fly in August, and returning early in spring. The eggs, which are pure white, usually number six or more and are placed among old castings, without any nest. As soon as the first one or two are laid, the bird begins to sit, and thus the young are hatched at various times, the eldest of the family helping to incubate the later eggs.

The owlets, at first clad in white down, are fed through the evening and night, but I have found dead mice beside them in the daytime. During the day, as well as by night, they utter a curious sound, like that made by the valve of a cistern.

The food consists almost entirely of mice, rats, voles, bats, and shrews, the Sparrow being the only bird whose remains I have found at the nest referred to. They seem able to bear great heat without any inconvenience, as when a July sun was beating on the roof of their dwelling the heat inside was suffocating.

About the time of twilight when the mice come out to feed and play, the owls begin their hunt, beating along the hedges and among orchard trees with noiseless flight not far from the ground, and dropping suddenly on their unsuspecting prey; at times they utter a weird harsh cry, which can be heard a long way off.

The female resembles the male, and as is the case with most birds of prey, is the larger bird.

Several occurrences of the Dark-breasted race, which inhabits Central Europe, south Sweden, and Denmark, have been noted.



Long-eared Owl.
Barred Owl

Screech Owl
Short-eared Owl

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THE LONG-EARED OWL.

Asio otus (Linnæus).

PLATE 26.

This species, a resident in the British Islands, frequents woods of pine and fir, while in autumn its numbers are much increased by others which reach our eastern counties from abroad. It is widely distributed over Europe, inhabiting also North Africa and many parts of Asia.

The Long-eared Owl appropriates the former nest of a Magpie, Crow, Jay, or Woodpigeon, and sometimes the "drey" of a squirrel; these are made to suit the convenience of the bird by the addition of twigs or some soft material such as rabbit's fur. In March it lays its smooth white eggs, from four to six in number, and according to Mr. S. E. Brock (*Zoologist*, 1910, p. 117), incubation lasts twenty-eight to thirty days.

Occasionally this species nests on the ground, when the nest resembles the Short-eared Owl's. It preys on rats, voles, and mice, while a considerable number of small birds, as well as beetles, are taken.

Being nocturnal in its habits, it usually passes the day close to the trunk of a tree, and if disturbed has a quaint way of raising its ear-tufts, contracting the feathers of the body, which at the same time is stretched out to much more than its usual length, while the bird peers with half-closed eyes at the disturber of its peace below.

Mr. R. J. Howard, who has provided me with a number of notes on the Owls and other birds of prey, which I have freely used, informs me that in the breeding season the call of the male is "hoo-hoo-hoo," repeated very slowly; when the birds are disturbed at their nests the cry is a loud "wack-wack," while that of the nestlings is a loud mewling.

The young often leave the nest before they are able to fly, and climb to it again aided by their bills. There are grey as well as rufous phases of plumage of the Long-eared Owl.

THE SHORT-EARED OWL.

Asio accipitrinus (Pallas).

PLATE 26.

Avoiding woodlands, this species is much more a bird of the open than the other British Owls, frequenting stubble and turnip-fields, moors, furze-covered slopes, and marsh-lands. It breeds regularly in many places in Great Britain, but much less frequently to the south of Lancashire and Yorkshire than in the north, while in Ireland it never nests. In all three countries it is not uncommon as a bird of passage from autumn to spring, and as numbers often arrive from oversea at the same time as the Woodcocks, it is sometimes called the Woodcock-Owl. It is widely distributed over both hemispheres, inhabiting Europe, Asia, Africa, and America.

The Short-eared Owl breeds late in the year, laying its creamy-white eggs in a slight cavity among sedges or heather. They usually number from four to eight, occasionally amounting to ten or twelve. It is well known that under the stimulus of an abundant food supply the number of eggs laid is largely increased. The young ramble a considerable distance from the nest before they are fully fledged.

The food consists largely of voles, field-mice, rats, small birds, occasionally of fish, bats, beetles, and large moths. During the periodical vole plagues, Short-eared Owls flock to the infested districts, and remain as long as food continues plentiful. They may frequently be seen hunting during daytime with a buoyant unsteady flight, and do not seem inconvenienced by bright sunlight.

The note of this Owl when disturbed is somewhat similar to that of the Long-eared species.

Mr. R. J. Howard tells me that "when stooping down to examine a full-fledged young Short-eared Owl—one of a nest containing seven young and an addled egg—a parent bird struck him a resounding smack on the head, leaving marks of the claws on his hat. The following season at this spot, a bird, presumably the same, struck his claws into the nape of the neck of the gamekeeper, covering his collar with blood. On this Lancashire moor, which has been planted by the Liverpool Corporation, all Owls and Kestrels are strictly preserved for the purpose of keeping down the voles and field-mice, which do great damage to the young forest trees. A large handful of castings taken here on the 24th May consisted altogether of the remains of Short-tailed Voles and one Shrew. There were no remains of birds. Four pairs of Short-eared Owls reared broods on this moor in each of the seasons mentioned above."

The sexes are alike in colour.

THE TAWNY OWL.

Syrnium aluco (Linnæus).

PLATE 26.

This species, also called the Brown or Wood-Owl, is resident in many parts of Great Britain, and of late years has been introduced into Ireland. It is scarce in the north of Scotland, but seems to be the most abundant of the Owls in most parts of that country. It inhabits the greater portion of Europe, occurring as far north as Scandinavia and south to the Mediterranean. It ranges eastwards to Siberia, and is also found in Persia, Asia Minor, and Syria.

The Tawny Owl loves the shade of old and ivy-covered trees, and early in the year lays its eggs within a hollowed trunk or in the old nest of a Crow or Rook, although it will occasionally use a rabbit-hole or even the bare ground. The eggs vary in number, from three to five or six, and are rounded in shape and pure white in colour.

Its well-known hooting note, which has been rendered as "whoohoo," is often heard more frequently during the autumn and winter months than in summer.

The food of this species consists chiefly of rats, mice, voles, small birds, and occasionally fish, and it should be carefully protected.

A phase of this Owl sometimes occurs of a much greyer tone of colour than the better known tawny form.

TENGMALM'S OWL.

Nyctala tengmalmi (J. F. Gmelin).

PLATE 27.

Tengmalm's Owl, a rare visitant to Great Britain, has been recorded about twenty times in England and four in Scotland. Although migratory in autumn and winter, its home is in the forest regions of Northern Europe, and high up on the wooded mountain-sides of the central and eastern portions of that continent, while it also ranges into Siberia.

Its four to six—occasionally ten—white eggs are laid, according to Wooley, either in holes of trees or in the nesting-boxes placed by the Lapps for the use of Golden-eye and other ducks, and it is said to occupy the deserted nest of the Black Woodpecker.

Its food consists of lemmings and other small mammals, as well as birds and beetles.

Wheelwright, in his notes on the ornithology of Lapland, describes its note as a "very musical soft whistle."

The ear orifices in most Owls are not symmetrical, but the late Professor Collett has drawn attention to the fact that this want of equality extends to the skull in this species.

It may readily be distinguished from the Little Owl by its rather dense but downy plumage, and the thick covering of feathers on legs and toes.



THE LITTLE OWL.

Athene noctua (Scopoli).

PLATE 27.

It is hard to say whether the Little Owl has ever reached this country unassisted, the first having been taken alive near the Tower of London in 1758. As far back as 1843 Waterton is known to have turned out five near Wakefield, and since then large numbers, imported alive from the Continent, have been liberated by the late Lord Lilford in Northamptonshire, Mr. Meade-Waldo in Hampshire, and Mr. St. Quintin in Yorkshire, whence it has spread far and wide.

It inhabits Europe from as far north as the Baltic to the Mediterranean, slightly different races being found in North Africa and Western Asia.

The eggs, white in colour and numbering three to five, are placed within a hollow tree or in some cavity in walls or rocks, or even in a hole underground.

A great part of the food consists of insects, mice, and small rodents, but owing to its custom of often hunting in daylight, many small birds are caught and killed; it is therefore much disliked by other birds, and I once saw as many as seven different species clamouring round their enemy.

It has a monotonous double note.

This Owl was accounted by the ancient Greeks as the bird of Pallas Athene, and hence its likeness is often to be found on their coins.

THE SNOWY OWL.

Nyctea scandiaca (Linnæus).

PLATE 27.

This fine species is a circumpolar bird, breeding among the Arctic wastes of both hemispheres, and leaving its more northerly quarters in the winter to escape the rigours of the climate and consequent want of food.

About twenty examples have been taken in England, and more than that number in Ireland, while in the north of Scotland, especially in the Orkneys, Shetlands, and Outer Hebrides, it may be considered an annual visitor.

It breeds on the open fjelds and tundras away from forest growth, the nest being often a mere depression in the moss-covered ground, though sometimes, according to Seeböhm, made of "a few lichens, mosses, and feathers." It contains from six to eight or even more creamy-white eggs, the incubation period being just five weeks.

The Snowy Owl feeds chiefly on the lemming and other small mammals, but does not, however, confine its diet to these, preying also on Ptarmigan, Willow-Grouse, and Arctic hares, and hunting by day as well as by night. Mr. Millais says: "In Iceland the Snowy Owl preys largely on fish. I have seen them catching quite large char."

During the breeding season the male is very bold and fierce, and will attack anyone approaching the nest. The cry is loud and harsh. Both sexes show a great variety in the markings of their plumage, but the females are more strongly barred with dark than the males. The latter are sometimes almost entirely white, showing only a few brownish-black spots on their snowy feathers.

THE HAWK-OWL.

Surnia funerea (Linnæus).

PLATE 27.

The Hawk-Owl, of which there are two forms, one inhabiting Northern Europe and Asia, and occasionally occurring in Alaska; and the other a native of North America—the *Surnia ulula caparoch* of trinomialists—is a rare visitor to the British Islands. Of the latter race, which differs mainly from the European bird in having the transverse bars on the breast broader and of a ruddier colour, four examples have occurred, while about an equal number of the former have been recorded.

The European Hawk-Owl lays its eggs, which are white in colour and number from five to eight, in a hole in a decayed pine or fir, or in the nesting-boxes of hollowed trunks set up by the peasants of Scandinavia for ducks.

It preys on lemmings, mice, and other rodents, as well as birds, such as the Ptarmigan, Willow-Grouse, and Siberian Jay.

According to Mr. G. E. Lodge—who, having had good opportunities of watching the habits of this species in Norway, obligingly lent me a series of sketches done from life, which were invaluable to me when painting the picture—the Hawk-Owl usually takes up a position on the bare upper branch of a pine, keeping the body and tail in a much more horizontal position than other Owls, and with head pressed downwards watches with its keen yellow eyes for some movement that might betray the whereabouts of the prey below: they are very fearless, and often show a considerable amount of bold curiosity on the sight of a human being, frequently flying straight towards one, and settling on the top of a fir, either large or small.

The Hawk-Owl has a weird strange cry, and does not avoid sunlight.

Like the other Owls, the female is larger than the male, but shows no appreciable difference in colour.

THE SCOPS-OWL.

Scops gin (Scopoli).

PLATE 27.

Nearly sixty examples of this little tufted Owl, the smallest known in this country, have occurred in the British Islands since 1805, when it was first noticed in Yorkshire. It is common during summer in Southern and South-eastern Europe, and, according to the B.O.U. "List of British Birds" (1915), it extends its migrations to "Holland, Belgium, northern France, Germany, and Switzerland."

It also breeds in Asia Minor, Palestine, and North-west Africa, migrating during winter still farther south in Africa.

The Scops-Owl usually nests within a hollow tree, and lays five or six pure white eggs.

It is almost entirely insectivorous, and is seldom seen abroad during the hours of daylight, which it spends in drowsy sleepiness, usually perched close to the trunk of a tree.

It has a curious monotonous cry, constantly repeated, resembling the syllables *kew-kew*.

I am indebted to my friend, Mr. G. E. Lodge, for kindly lending me a sketch, taken from life, which I made use of for the plate.



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THE EAGLE-OWL.

Bubo ignavus, T. Forster.

PLATE 28.

The Eagle-Owl, one of the strongest and most rapacious of the birds of prey, has occurred at various times in Great Britain, and although specimens obtained or seen in the Orkneys, Shetlands, the mainland of Scotland, and eastern parts of England were no doubt genuine visitants from Scandinavia, birds recorded elsewhere may have escaped from captivity, as it is often kept as a caged bird.

This species inhabits the wooded mountainous regions of Europe, from Scandinavia and northern Russia to the Mediterranean shores, and other forms have been recognised in Asia and North Africa.

It breeds early in the year, and lays its eggs, usually two or three in number, rounded in shape, and white in colour, in the deserted dwelling of some other bird in a tree. Often ledges of rock in sunny quarters on steep mountain-sides are chosen, or situations on the ground at the roots of trees, but in these places the bird does not construct a nest of its own, although often a kind of bed, on which the owlets repose, is formed by the accumulation of castings and fur.

The Eagle-Owl usually rests during the day in some dark and shady retreat, sallying forth in the evening in search of food. Owing to its size and strength it can without difficulty master birds as large as the Capercaillie, and hares, rabbits, and other game, besides young fawns, form a large part of its food.

Its deep sonorous note, often heard in the breeding season, resembles its German name "*Uhu*."

Order ACCIPITRES.

FAMILY VULTURIDÆ.

THE GRIFFON-VULTURE.

Gyps fulvus (J. F. Gmelin).

PLATE 29.

An immature specimen of this Vulture was captured near Cork Harbour in the spring of 1843, and another is recorded by Howard Saunders as having been seen near Southampton Water many years later. It is a common bird in many parts of the Spanish Peninsula, and is found across Southern Europe to the Ural Mountains, also in northern India and a great part of Africa.

The Griffon is gregarious during the breeding season, and builds its nest of sticks and grass on the ledges of cliffs or in rocky cavities; it lays one or two eggs, generally white, but sometimes blotched with reddish-brown.

The bird feeds on the carcasses of animals, discovered not by scent but by its wonderful power of sight, each individual while aloft not only searching the ground, but keeping its eye on any tell-tale movements of its neighbours.

The female is rather less in size than the male.

THE EGYPTIAN VULTURE.

Neophron percnopterus (Linnæus).

PLATE 29.

Two immature Vultures of this species were seen at Bridgewater Bay, Somersetshire, in October 1825, one of which was killed, and many years later, on 28th September 1868, another was obtained at Peldon, Essex.

It has a wide range over Southern and Eastern Europe, being found as far east as north-western India, and over a great part of Africa. It appears to be migratory in many places, and usually is seen in pairs.

The nest is made of sticks and any kind of odds and ends the bird can find, and is generally placed on a ledge or in a cavity in a cliff, occasionally in trees. The two eggs are creamy-white in ground colour, marked with brownish-red.

The bird feeds on reptiles, carrion of all kinds, and any filthy garbage it may come across, and therefore makes itself a most efficient scavenger in hot climates, where those useful members of society are non-existent. In character it is timid and cowardly.



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FAMILY FALCONIDÆ.

THE MARSH-HARRIER.

Circus æruginosus (Linnæus).

PLATE 30.

The Marsh-Harrier, known to fenmen as the Moor-Buzzard, although still occasionally visiting the British Islands in spring and autumn, has almost vanished as a resident species. It is possible, however, that a pair or two may linger among the bogs of Ireland.

At one time this fine bird was common in the fens and marshy districts of our eastern counties, and in places suited to its habits in Dorset, Devonshire, and other parts of south-western England. It is still plentiful among the marshes of Central, Southern, and Eastern Europe, and also inhabits North Africa and Asia.

The nest is usually placed on or near the ground among reeds, sedge, and rushes, and is built of dead reeds, sedge, and grasses. The eggs, bluish-white in colour, and occasionally having faint brownish markings, are four or five in number.

The greater part of the Marsh-Harrier's food consists of frogs and other reptiles, eggs, nestlings, and disabled waterfowl or Snipe, which are pounced upon as the bird slowly quarters the ground in regular beats, flying low down and moving backwards and forwards with steady flaps of its broad and long wings. Lord Lilford states (*Birds of Northamptonshire and Neighbourhood*) that "the female, whilst sitting, is fed by the male bird, who hovers over the nest and drops the prey to his mate."

It is only the fully adult male which shows the distinctive grey colouring on the wings and tail, as represented in the plate. The female has the tail and underparts brown, with some creamy-white on the shoulders of the wings. The second figure in the background gives the plumage of the young in the first year, with the conspicuous light buff-coloured head, which gave it the name of Bald Buzzard.

It may be noted here that the Harriers have a distinct frill of small close-set feathers passing from the sides of the head round the neck, causing a resemblance to the facial disc of the Owls, but according to Professor Newton (*Dictionary of Birds*): "No osteological affinity, however, can be established between the Harriers and any section of the Owls, and the superficial resemblance will have to be explained in some other way."

THE HEN-HARRIER.

Circus cyaneus (Linnæus).

PLATE 30.

This Harrier, which shows such a marked difference in the size and colour of the sexes as to have caused them at one time to be considered different species, is resident, though yearly diminishing in numbers, in some of the wilder parts of the British Islands. A few still breed in the Orkneys, Outer Hebrides, and Ireland, and within recent years it is said to have nested in England, as well as in Wales. It has a wide breeding range in Europe, from as far north as Scandinavia and Russia to Spain and Italy, whilst in winter it visits North Africa and Asia.

The Hen-Harrier haunts rushy, furze-covered land or moors and hill-sides clothed with heather and broom, and nests on the ground, sometimes under cover of a furze-bush or among tall heather, at others on the bare hill-side. The nest is built of sticks and sedges, being more lightly constructed if placed in the latter situation than in others, when it is often composed of a mass of dead herbage. From four to six eggs are laid, bluish-white in colour, and occasionally, but not always, marked with rust-coloured freckles.

The Hen-Harrier feeds on mice and other small mammals, reptiles, birds and their eggs, on which it pounces unexpectedly, and, unlike the Marsh-Harrier, does not hesitate to chase and strike down birds as large as the Red-Grouse.

When seeking its prey it shows wonderful command of flight, quartering the ground with great exactness as it flies with measured beats of the wings close to the ground, hovering as something catches its eye, or sailing gracefully over a hedge.

Macgillivray, who knew this bird well, has given a good description of its habits. The female, known as the Ring-tail, is much larger than her mate.



MONTAGU'S HARRIER.

Circus cineraceus (Montagu).

PLATE 30.

Colonel Montagu, from whom this species takes its name, was the first to distinguish it from the Hen-Harrier, having published an account of his discovery in his *Ornithological Dictionary* in 1802. It is a migratory bird, visiting the fenny districts of the eastern counties of England every summer and breeding regularly there when left undisturbed, and occasionally in other parts, as it did in Surrey in 1907. It is only a rare visitant to Scotland and Ireland, only about seven having occurred in the former, and a dozen in the latter country.

This species is plentiful in suitable localities over a great part of Europe, North-west Africa, and Asia, and spends the winter in Africa and India.

It makes a slight nest of twigs and dry grasses among furze or heather in open places, or of sedges in the fens, and lays four or five eggs of a very pale bluish-green, occasionally marked with some rust-coloured spots.

Montagu's Harrier much resembles the Hen-Harrier, but is slightly less in size and more slender in shape, while having its wings of more proportionate length, and therefore showing more buoyancy of flight.

Howard Saunders has pointed out in his *Manual of British Birds* that Montagu's Harrier "may infallibly be recognized by the outer web of its 5th primary having no emargination."

It lives principally on frogs, lizards, and other reptiles, as well as on eggs, small mammals, and birds.

A very dark brown or black form of this Harrier often occurs, which in a live specimen belonging to the late Lord Lilford, had the eyes as dark, if not darker, than a Falcon's, instead of the usual yellow colour.

THE COMMON BUZZARD.

Buteo vulgaris, Leach.

PLATE 31.

The days when the Buzzard could be considered common in the British Islands have long since passed, though it is still a resident, but in diminishing numbers, in parts of northern and western England, in Wales, central and western Scotland, and the Inner Hebrides, where its plaintive wailing notes may yet be heard.

It is found over the greater portion of Europe, ranging as far eastwards as Poland and southwards to Spain; while many migrate in winter to Africa.

In hilly districts its home is usually on a ledge of a bush-covered cliff, scattered here and there with a birch or rowan, but in woodland country the nest, which is made of sticks and heather, with a lining of dead grasses and wool, is placed in the fork of a tree. It contains three or four eggs, in ground colour dull white, spotted and streaked with rich reddish-brown, and showing pale lilac shell-markings.

This Buzzard when beating the country-side for food, flies not far from the ground, and pounces on its prey, which consists mainly of small mammals, such as field mice and moles, young rabbits, frogs, insects, and earthworms, and it is therefore not detrimental to game. Although active enough when in search of food, it appears to be sluggish at other times, and will often sit for a long time on the branch of a tree or on some rock from which it can command a wide view. At times it flies at a great height, moving gracefully in circles, when it is often mistaken for the Golden Eagle, although it may always be distinguished, if near enough, by the white patches under the wings.

The Common Buzzard shows great variation in colour among different individuals, some being more or less a uniform dark brown with a beautiful plum-coloured gloss, and others much marked with white on the breast and lower parts.



MOZ LIBRARY
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THE ROUGH-LEGGED BUZZARD.

Buteo lagopus (J. F. Gmelin).

PLATE 31.

This species, easily distinguished from the Common Buzzard by its feathered tarsus, and in the adult by the creamy-white on the head, and lighter tail, is a more or less regular autumnal and winter visitor to Great Britain, mostly to the eastern parts, where numbers of immature birds have sometimes been observed. It has never been known to breed in the British Islands, the accounts of its having done so being unreliable, but it nests in Northern Europe and Asia, whence it wanders southwards in autumn.

The nest, placed in a tree or ledge of rock, is built of sticks and twigs, sometimes with some lichen added, and contains from three to five eggs, which though subject to some variation in colour, are similar to the Common Buzzard's.

In our country the Rough-legged Buzzard is partial to open country, especially warrens and wastes overrun with rabbits, on which it preys, as well as on mice, reptiles, wildfowl, and other birds.

During the breeding season it is said to utter a plaintive wailing note, likened to the mewing of a cat.

THE SPOTTED EAGLE.

Aquila maculata (J. F. Gmelin).

PLATE 31.

Some eight or nine examples of this Eagle have occurred in England, three of these having been shot in the autumn of 1891 in Suffolk and Essex, while two others have been obtained in Ireland.

Naturalists have distinguished two distinct races of this species, one considerably larger than the other, and, according to Howard Saunders, those visiting the British Islands have been "chiefly—if not entirely"—the larger. The two forms have a wide distribution over Europe, North Africa, Western Asia, China, and India.

The Spotted Eagle builds its nest, which is large and very flat, high up on big trees, and generally lays two eggs, in colour dull white, streaked or spotted with brownish-red.

It appears to live chiefly on reptiles, small mammals, and water-birds, and utters a shrill cry.

Immature examples of the larger race seem for the most part to be those which have reached our coasts, and I have therefore given a picture of one of these, which vary somewhat in colour. When fully adult, the colour becomes a paler brown, with only a few small spots on the lesser wing-coverts.

THE GOLDEN EAGLE.

Aquila chrysaëtus (Linnæus).

PLATE 32.

This grand bird, although now confined as a resident to the wildest parts of the Highlands of Scotland, yet at one time had its eyrie in England. Willoughby described a nest found in the Peak of Derbyshire in 1668, and also records that in his time it bred on the Snowdon Hills. It lingered much later in the Lake District and on the Borders, where, Bewick states, it formerly bred on the steepest part of Cheviot, while over the border, in Scotland, eyries are said to have been occupied "for some years after 1850 in Ayrshire and Kirkcudbrightshire" (Howard Saunders's *Manual*, 2nd ed.).

The Golden Eagle inhabits Europe, where it is found in mountainous districts, as well as North Africa, Asia, and America; and various races, showing difference in size and colour, have been distinguished.

Very early in the year the royal birds prepare their nest, usually returning to one occupied in previous seasons, which is situated on a ledge in the steep and rocky face of a precipice or inaccessible walls of some wild corrie among the hills. The site is chosen so that a projecting crag shelters the eggs and young from the weather. Occasionally the nest is so placed that it is not difficult to reach it from below, and I have seen one only about twenty feet above a broken, grassy slope, while others, again, are placed in trees. Outwardly the eyrie is constructed of sticks, forming a rough platform, on which are put pieces of heather and other material, and in the centre is a cup-shaped depression, small in proportion to the rest of the nest, which is lined with the flattened blades of the wood-rush (*Luzula sylvatica*), a common plant on the Scottish mountains. The eggs are laid early in April, and are usually two, though three may sometimes be found. They vary considerably in colour and markings, even in the same nest, and may be dull white, with either a grey or buffish tinge and mottled with shades of reddish- or purple-brown, while others, again, are sometimes pure white. The young, clothed at first in white down, are carefully fed and tended by the parent birds, who remove the feathers and fur from game before presenting it.

THE GOLDEN EAGLE

The Golden Eagle feeds principally on the Mountain Hare, but Grouse and Ptarmigan are also taken, as well as lambs and very young red-deer calves. It will also feast on dead sheep and stags which have been left out on the hill.

I have had a good many opportunities of watching this fine bird, when sketching in lonely places among the deer-forests: they may sometimes be seen in pairs, but more often alone, beating the slopes of the mountains at some height from the ground, and ready at any moment to swoop down on some helpless victim who may be attempting to escape observation by crouching among the rocks and heather. Often the Eagle's approach may be known before he comes in sight, by the appearance of terrified packs of Grouse or Ptarmigan who fly before him at their utmost speed.

One can form no idea of the lightness and buoyancy of the Eagle's flight until the bird has been seen at freedom in his own domain, and it is an inspiring sight to watch him on a bright sunny day soaring in wide circles as he ascends to a great height, his broad motionless wings outstretched to their full extent, and with an upward curve at their ends, supporting him without effort. While the bird is aloft, the curious notched pinion feathers may be clearly seen, separated like the fingers of a hand.

Like Hawks, the Golden Eagle is sometimes chased and annoyed by lesser birds, such as Curlews and Rooks, but, on the other hand, is sometimes very bold, attacking and attempting to beat over precipices unwary calves of the red-deer, which are sometimes surprised in difficult places.

The Golden Eagle may always be distinguished from the White-tailed or Sea Eagle by having the legs feathered right down to the yellow toes, while the latter bird has the lower half of the tarsus bare.

There is also a difference in the structure of their feet; these in the Golden Eagle are covered with a network of little plates as far as the last joint, on which there are four or sometimes three broad scales. On the other hand, the White-tailed Eagle has broad scales along nearly the whole upper part of the toes.

THE WHITE-TAILED EAGLE.

Haliaëtus albicilla (Linnæus).

PLATE 33.

The White-tailed or Sea Eagle, once numerous in the Highlands and northern parts of Scotland, as well as in Ireland, and known in former days to nest in England, seems to have disappeared altogether as a resident species except in the Outer Hebrides. Until recently it bred in the Shetlands, but according to *Bird Notes and News* published this spring (1915), by the Royal Society for the Protection of Birds, the last remaining bird there is one very old solitary female, who still haunts the old nesting-place, "but when last seen was flying out to sea mobbed by Carrion-Crows."

In autumn and winter individuals—mostly immature birds—visit us from abroad, which are often mistaken for Golden Eagles. It has a wide range over Northern Europe and Asia, and nests as far south as Albania.

The eyrie is built on a high cliff overlooking the sea, or inland on a rocky ledge, and sometimes on a tree, or even on the ground. The materials of the nest are similar to those used by the Golden Eagle, and the two eggs, pure white in colour, are laid in March or April.

In character it is less bold than the last-mentioned bird, and feeds largely on fish and carrion along the shore, where its loud yelping cry could be heard in former days. Rabbits are also a favourite food, and shepherds used to suffer from its depredations in lambing time.

The sexes are alike in colour, but the young differs from the adult by having a dark tail.



A. Thorburn
1914.

Osprey - *Pandion haliaetus* - 249
adult

Pl. 100-1

THE OSPREY.

Pandion haliaëtus (Linnæus).

PLATE 33.

The Osprey, at one time a regular visitant during the summer months to many a Highland loch, and returning year after year to the same eyrie, has now deserted its two last well-known strongholds, viz. Loch an Eilan in 1903, and Loch Arkaig in 1911. Whether it may still nest elsewhere is not known, and without doubt the destruction of this fine bird as a breeding species was caused partly by the greed of egg collectors, and also by the wanton shooting of both old and young birds during their migration southwards in autumn, and of the former when they return in spring. Migrating Ospreys still occur, however, during those seasons in the British Islands, including Ireland, though they have never been known to breed there. Elsewhere this species has almost a world-wide distribution, but has not been recorded in Greenland or Iceland.

The nest is a large piled-up structure, built of sticks and turf, on the flattened top of which is formed a small moss-lined cavity to receive the eggs. These are generally three in number, and vary a good deal in colour, the usual type being white or buffish-white in ground colour, marked with spots and blotches of deep reddish-brown, sometimes with underlying shell-markings of violet-grey.

In Scotland the site selected in most cases was the top of some ruined building, by the side or surrounded by the waters of a loch, the summit of a steep conical island rock, or the upper branches of a tall old pine.

A large extent of water, well stocked with fish; solitude and freedom from molestation, seem essential to the Osprey, which obtains its prey by a sudden plunge into the water, after hovering Kestrel-like at some height above the surface, while should the fish be within easy reach, it wets little more than its feet in the process. These are wonderfully adapted to the purpose of securing their slippery quarry, being armed with long curved claws, while the under-surface of the toes, the outer one of which is reversible, are rough and studded with pointed scales. The legs are strong and muscular, the thighs, unlike those of most raptorial birds, being clothed with short close feathers to withstand the wet.

The female is larger than the male, and is more marked with brown on the breast.

THE GOSHAWK.

Astur palumbarius (Linnæus).

PLATE 34.

This forest-loving species is now only a rare visitant to Great Britain, a few, for the most part immature birds, occasionally reaching this country, generally in the eastern parts.

Colonel Thornton, in his *Northern Tour* published in 1804, states that he had seen nests and obtained a nestling from the old pine forests of Rothiemurchus and Glenmore, showing that the Goshawk bred a little previous to that date in the Spey district.

In Europe it frequents wooded country from Lapland and Russia southwards to the Mediterranean, and eastwards to the Caspian Sea.

The nest is built by the bird itself, high up in some tree on the edge of the forest, and is composed of sticks and twigs, and often occupied by the same birds for many successive years, and as material is annually added, it frequently attains a great size. The four eggs are very pale bluish-green, occasionally showing spots of reddish-brown.

The Goshawk, which resembles its diminutive relative the Sparrow-Hawk, is bold and predatory, and has a curious wild expression in its eye. It preys on squirrels, hares, rabbits, as well as on game and other birds, and is much esteemed as a trained bird by falconers, being well adapted for work in an enclosed country. Though the male is superior to the female in speed, he is much inferior in size and strength, but both have great courage and show an almost incredible lust for killing.



Goshawk

Screech Owl

THE SPARROW-HAWK.

Accipiter nisus (Linnæus).

PLATE 34.

In spite of incessant persecution the Sparrow-Hawk still holds its own in districts where there are large tracts of woodland, especially in those where game is not strictly preserved. Except in the extreme north, it breeds throughout Europe, though sparingly in Spain and Italy, while in Asia it ranges as far east as Japan and southwards to the Himalayas.

Mr. R. J. Howard has provided me with the following account of the habits of this species: "It usually builds its own nest of twigs broken by itself from the branches. Should the first clutch of eggs be robbed the bird will then probably take possession of the nest of some other bird, and in it lay her second clutch. The eggs, from four to six, sometimes seven in number, are round in shape, bluish-white, blotched more or less with reddish-brown, and are laid on alternate days.

"Incubation lasts thirty to thirty-two days. The difference in size of the young is, I think, sexual rather than due to age; for a young female almost covered with down will be about double the weight of her brother who is more advanced in feather.

"As is the case with almost all birds of prey, the female remains in the neighbourhood of the nest to brood and protect the young, whilst the cock does the hunting. He brings food to a spot within gunshot of the nest, calls to the hen, who flies to him and takes the quarry, already plucked and frequently headless, to the nest, where she breaks it up and feeds the young. Should the hen be killed whilst the young are too small to tear the food for themselves, I think they would perish from hunger, for although the cock would bring birds to the nest, ready plucked, his instinct would carry him no further. A gamekeeper shot a cock Sparrow-Hawk in the evening, having killed the hen the day before. The young in the nest were surrounded with small birds which had been brought in by the cock. All were more or less plucked, the heads of some having been pulled off. I saw and counted these; one House-Martin, one Wren, several Wagtails, Blue Tits, Chaffinches, &c., twenty-one small birds in all. I have other somewhat similar records, but not with so many small birds collected." . . .

"The short round wings and the large tail enable the bird to thread its way through thick cover in a wonderfully rapid manner. The long slender legs give it a good reach, and the long flexible toes, armed with claws as sharp as needles and also furnished with elongated, indiarubber-like pads, enable it to secure a grip on the feathered body of its quarry that is seldom relaxed so long as life is left in the poor victim. It takes any bird up to or exceeding its own weight which it can catch; the female can and does kill Woodpigeons."

The female is very much larger than the male, and in old age often assumes the colour of her mate.

THE KITE.

Milvus ictinus, Savigny.

PLATE 35.

In old days the Kite, often called Glead or Gled from its graceful gliding motion during flight, was everywhere abundant in our country, and appears to have been common in many places till the early part of last century. Now it is only known as a breeding species in certain parts of Wales, but according to the B.O.U. "List of British Birds" (1915), it "is said to have nested in Devonshire in 1913." Elsewhere in Great Britain it is now only an uncommon visitant, and does not appear to occur in Ireland, but it has a wide range over Europe, as well as North Africa and Asia.

The nest is generally built high up in the fork of a tall tree, and is composed of sticks and various odd pieces of rubbish, waste paper, and rags. The eggs, usually three in number, are dull white, with blotches and streaks of rust-colour.

The Kite will eat anything in the way of food which comes easily to hand, including offal of all kinds, reptiles, small mammals, and birds. Formerly, when it was abundant, it made sad havoc among the young chickens in the poultry yard, and to prevent its depredations on the Scottish crofts, where the rents were paid with pullets, children were generally posted on the watch to "sheu the Glead" (Mudie).

On the wing the Kite is a most graceful bird, often sailing in wide circles and guiding its flight by its long forked tail. It was much prized for sport in the old days of falconry, being looked upon as the special quarry of kings, and hence the epithet "royal" was applied to it.

It has a plaintive mewling note. The male is rather brighter than the female in colour, and a little less in size.



THE BLACK KITE.

Milvus migrans (Boddaert).

PLATE 35.

This migratory species, smaller and duller in colour than our Kite, though by no means black, may easily be distinguished by its shorter and less forked tail, and has twice occurred in Great Britain, the first example at Alnwick, Northumberland, in May 1866, and the other near Aberdeen in April 1901. It breeds principally in Central and Southern Europe, as well as in Asia and North Africa.

Lord Lilford says, in his work on British Birds, "the present species generally nests in pine-trees, poplars, or willows, at a considerable height from the ground: several pairs are often to be found breeding in close vicinity."

The two eggs resemble those of the Red Kite, and both birds live on much the same kind of food, although the Black Kite is more partial to fish.

The sexes are alike in colour.

THE HONEY-BUZZARD.

Pernis apivorus (Linnæus).

PLATE 35.

The Honey-Buzzard is a migratory species which at one time appears to have been a regular summer visitor to England, though it apparently was never plentiful. Their nests have been recorded in wooded districts as far north as east Ross-shire and Aberdeenshire, while between fifty and sixty years ago it bred annually in the New Forest, and would do so still if not constantly persecuted and destroyed. It is well known during summer in most parts of Europe, from Norway, Sweden, and Russia to northern Spain and Italy, ranging eastwards to western Siberia, and wintering in Africa and Madagascar. When passing to and fro between Europe and Africa, the birds have been described as flying in large flocks, which pass continuously for several days.

The Honey-Buzzard selects for its home a tall beech or oak, and builds its nest—often placed on the foundations of an older one of some other species—of sticks, lined with beech twigs and fresh green leaves of the same tree.

The late E. C. Newcome, as quoted in the fourth edition of "Yarrell," observed that in France the young when in the nest were sheltered by a bower of leafy boughs, a fact which has not been noticed in our country. The two or three eggs are buffish-white in ground colour, blotched or thickly clouded with various shades of rich brownish-red.

The Honey-Buzzard is an entirely harmless species, its principal food consisting of the grubs of wasps and wild bees, obtained by digging out the combs with its powerful feet, which enable it to excavate deeply into the ground; worms, caterpillars, frogs, lizards, and mice are also eaten. It is very nimble and can run with great speed on the ground, which peculiarity was noticed long ago by Willoughby.

In the *Victoria History of the County of Sussex* Mr. J. G. Millais has given an interesting account of a tame Honey-Buzzard, which would perch on his hand, whence it would sweep after and capture passing bees or wasps, following the latter insects to their nest in order to dig out the comb. It appeared to be quite indifferent to the attacks of the insects, which were unable to penetrate the armour of its feathers.

The Honey-Buzzard is subject to great variety of colouring, which is more evident in immature specimens. The white-headed form shown in the plate was taken from a beautiful living bird of the year, in the late Lord Lilford's collection, which was very confiding and gentle in its manners, perching freely on any person's arm, and living on a diet of bread and milk. It frequently uttered a peevish wailing cry.



A. Thorburn 1914

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THE GREENLAND FALCON.

Falco candicans, J. F. Gmelin.

PLATE 36.

This truly noble bird, one of the three large northern Falcons belonging to the group formerly known as "Jer," or "Gyr," is, as its name implies, a native of northern Greenland, breeding also within the Arctic Circle in North America.

The late John Hancock was the first to point out that it may be distinguished at all ages from the Iceland and Gyr-Falcon by the spots and markings telling dark against the light ground colour of white; whereas in both the other forms the plan of colouring is reversed, these having a dark ground relieved with spots and markings of white or grey. Owing to the hunting grounds of the Greenland Falcon in the far north being frozen up in the winter months, and thus cutting short its food supply, a good many birds migrate southwards during the cold season, and thus it more often visits our islands, especially Scotland and Ireland, than the other two species, which live in a less severe climate.

The nest is placed on the rocky ledge of a cliff, sometimes on the former habitation of some other species, and usually contains four eggs, in ground colour reddish-orange, spotted over with reddish-brown or brick-red.

The Greenland Falcon is the most beautiful of our Hawks, with its full dark eye and snowy plumage, and was in great repute in the days of falconry, when it was flown at the larger kinds of quarry, such as Cranes and Herons, but its place has now been taken by the Peregrine for purposes of sport. In olden times so much value was set on this bird, that it was looked upon as a gift for kings. Falconers, skilled in trapping Hawks, were sent to Norway and Iceland to obtain it, and it seems always to have been more prized than the grey Falcons. The young bird has broad brownish markings above, and tear-shaped spots below, and the tail is barred with dusky brown.

THE ICELAND FALCON.

Falco islandus, J. F. Gmelin.

PLATE 36.

This species occasionally visits the British Islands in winter, though less frequently than the Greenland Falcon, and, like the other northern Falcons, shows considerable variations in colour in different individuals. In all these Falcons, however, when once they have attained their mature plumage, no alteration takes place in the type of markings or colour, a dark bird always remaining so, while a light one keeps the same phase of colouring during its lifetime.

This Falcon is a resident in Iceland and southern Greenland, the race inhabiting the latter country, known as *F. holboelli*, being whiter than the true Icelfander, and is apparently intermediate between it and *F. candicans*.

In Iceland this species lays its eggs, which are similar to the Greenlander's, on ledges of cliffs, or in the unoccupied nest of a Raven or other bird. It often chooses inland situations, on precipices overhanging freshwater lakes, where it obtains an abundant supply of waterfowl and other birds. It was, like the species just described, much sought after in ancient times by falconers, but not prized so much as the more northern bird.

The young have the general plumage of the upper parts dark brown, with brownish-yellow edgings to the feathers, and the lower portions broadly marked with longitudinal bands of dark brown on a lighter ground.

THE GYR-FALCON.

Falco gyrfalco, Linnæus.

PLATE 37.

Two or perhaps three specimens only of the true Gyr-Falcon have occurred in England, the first, an adult bird, having been shot at Mayfield, Sussex, in January 1845. Inhabiting more southern regions than either of the other two northern Falcons, it appears to have less inducement to wander in winter from its haunts in Norway, Sweden, Lapland, and northern Russia, though it is said to occur in Greenland and Arctic America.

The adult birds may be distinguished from those of the Iceland Falcon by their darker colouring, especially on the head, by the dark moustacial patch, and also by their slightly smaller size. The immature birds are practically the same in colour in both species, as are likewise the eggs.

It breeds on cliffs like its congeners, and preys chiefly on wildfowl and Ptarmigan.



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THE PEREGRINE FALCON.

Falco peregrinus, Tunstall.

PLATE 37.

The Peregrine Falcon still retains its old eyries in many parts of our islands, and though by no means common, is perhaps more numerous than our other large birds of prey, and in relation to its size is without doubt the most daring and fearless of them all. In ancient times, when, as now, its high courage, hardy constitution, and docility were greatly valued by falconers, its breeding-places were much more numerous and strictly guarded. During autumn a good many Peregrines, mostly birds of the year, known as "Passage Hawks," reach our country from abroad, usually following the hosts of migrating ducks from more northerly regions, and many of them take possession of a hunting ground and stay for the winter. As a resident or migrant the Peregrine is well known all over Europe from Scandinavia to the Mediterranean, within the area of which there resides a smaller form known as *F. pumilus*; and, admitting different subspecies, it may be said to have a world-wide distribution.

The eyrie, often the former home of some other bird, is usually situated on some steep rocky cliff, either overhanging the sea or inland, while it is occasionally placed in trees. The same station—for the nest is merely a hollow scratched out on the earth-covered shelf, and surrounded by bones and castings—is often occupied for many successive years, even in some cases used by succeeding generations of Falcons for centuries; and if at any time one of the pair be destroyed, the survivor seems to have no difficulty in quickly obtaining another mate. The eggs are usually three or four in number, and vary in colour, some closely freckled with rich orange-brown, others with deep brick-red.

In hawking language the female is always known as the Falcon; the male, from his smaller size—considered as one-third less—being called the "Tercel" or "Tiercel." At the present time this noble form of sport, far from being extinct, is still carried on in various parts of the country where the open nature of the ground allows it to be practised with success.

The food of the Peregrine consists chiefly of waterfowl—including on occasions

BRITISH BIRDS

birds as large as wild Geese—Pigeons, Grouse, and other species, struck down while in full flight by a lightning stoop from above, the Falcon always striving to get above its quarry in order to deliver the fatal stroke: the velocity of this downward rush is almost incredible, and even during a “stern chase” the speed is extraordinary. I have seen one in full career after a small flock of Golden Plover, and never remember observing any birds fly so fast. From constant practice wild Peregrines are able, by skill and wing power, to capture the Peewit, which often baffles any but the best-trained Hawks by its rapid turns and shifts. When the Falcon takes to soaring, it can rise to an immense height, and frequently passes out of sight. This fine bird is ruthlessly and needlessly persecuted and done to death by many game preservers.

The late Lord Lilford, while stating that the Peregrine can and does take Grouse and Partridges when she gets a fair chance and is hungry, adds “but it must be remembered that as a rule she captures her ‘quarry’ in the air, and that our common game-birds just mentioned are of terrestrial habits and certainly by no means willing to take wing when a Falcon is in sight, but do their utmost to squat close and conceal themselves, so that they are by no means the habitual or even (in my opinion) a particularly favourite prey of the Peregrine.”

Two examples of the American Peregrine or Duck-Hawk, *Falco anatum*, have occurred in England, the first shot by Mr. W. Whitaker, on 31st October 1891, at Newbold Verdon, near Market Bosworth, Leicestershire, and now in his possession, and the other netted on the Lincolnshire coast, 28th September 1910, and recorded by Mr. G. H. Caton Haigh. This race is said to be larger and darker than our bird, but according to Elliot Coues (*Key to North-American Birds*), it varies a good deal in size and colour. This Falcon inhabits the greater part of North America.



Illustration of various falcons and kestrels, including Common Kestrel, Common Nighthawk, and others, shown in various poses and settings.

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THE HOBBY.

Falco subbuteo, Linnæus.

PLATE 38.

This beautiful little Falcon generally arrives in England about the middle of May, and though by no means common, breeds more or less regularly in the southern and south-eastern counties, being less frequently met with farther north. It is also distributed over Europe and North Africa, across Asia to Kamchatka, while in winter it occurs in China and India.

The Hobby is often described as being like a miniature Peregrine, but the wings are proportionally longer, and the dark markings of the underparts are longitudinal in the adult Hobby, whereas in the Peregrine they form transverse bars.

It breeds late in the season, usually laying its three eggs in June. These are deposited in the unoccupied nests of Crows, Magpies, or other birds, and resemble the eggs of the Kestrel, though not of so bright a red, nor so boldly spotted.

Although it sometimes kills small birds, and can even with its wonderful wing power outmanœuvre and capture the Swift, the Hobby is largely insectivorous, feeding on dragonflies, beetles, grasshoppers, and other insects. Lord Lilford says (*Birds of Northamptonshire and Neighbourhood*): "In pursuit of its prey the rapidity of the Hobby is marvellous, and the manner in which it turns and mounts after making a stoop is quite unrivalled by any bird of prey with which I am acquainted."

The Hobby, however, when trained for purposes of sport, in spite of all its fine powers of flight, is not a success, for although it "waits on" beautifully, flies well to the lure, and is very docile, it is a poor *footer*.

The cry is very like the Kestrel's, and also resembles the Wryneck's, and the bird leaves us in September.

THE MERLIN.

Falco æsalon, Tunstall.

PLATE 38.

This little Falcon, the smallest of its kind inhabiting the British Islands, breeds more or less regularly on the moors of northern England, in Wales, Scotland and Ireland; while their numbers are increased in autumn by the arrival of others from the continent of Europe, over which it has a wide range, especially in the northern and central portions, as well as in Central Asia. In winter it visits North Africa, northern India, and China.

The nest, if such it can be called, consists of a few twigs of ling arranged round a hollow scooped out in the ground, either among heath on the open moor or on a heathery brae by the side of a burn, while at times the eggs are laid on a rocky ledge or in the deserted home of a Crow or some other species in a tree. They are generally four in number, and of a rich red-brown or purplish-red colour.

The Merlin, for its size, is one of the boldest of our Hawks, and will attack birds twice its own weight, but its chief food consists of the smaller species, such as Meadow-Pipits, Larks, Thrushes, Snipe, and other waders.

About the month of October the Merlins leave the moors, some moving southwards, others merely descending to the coast, where they linger till the spring. When hunting they strive to take their quarry by surprise, sweeping along by the side of a bank or concealed by a fold in the ground, but though not so swift as the Hobby, the Merlin can usually outfly and overhaul without difficulty the smaller birds on which it preys. It seldom perches on trees; stones and rocks being its favourite resting-places, hence it is sometimes called the Stone-Falcon. The Merlin is docile and easily tamed, but in confinement is delicate and seldom lives beyond the first moult. It was, and still is, much esteemed by falconers as a trained Hawk, and can be flown with success at Larks and even larger quarry.

The females, like so many birds of prey, are larger than the males, and occasionally, when old, assume more or less the colours of the other sex.

THE RED-FOOTED FALCON.

Falco vespertinus, Linnæus.

PLATE 38.

The Red-footed Falcon, which is closely related to the Kestrel, though resembling in build the Hobby, is a rare and irregular visitor to the British Islands, about forty examples having occurred therein. During summer it inhabits Eastern Europe and Western Asia, migrating in winter as far south as Central Africa. It is sociable in its habits, arriving at its breeding ground in flocks, and a number of nests are often occupied in the same tree.

The nests are not built by the birds themselves, but are the deserted homes of Rooks, Magpies, or Crows. The eggs, varying in number from four to six, are reddish-yellow, spotted and marked with reddish-brown.

It is perhaps more insectivorous than any of our Hawks, capturing much of its food on the wing, though it takes grasshoppers, beetles, and other insects on the ground, over which it can run with a nimbleness unusual in birds of prey.

It is said to be fond of marshy ground, sparsely scattered with timber, and its cry resembles the Hobby's.

THE KESTREL.

Falco tinnunculus, Linnæus.

PLATE 38.

The Kestrel, by far the most numerous of our predatory birds, though resident in many parts of the British Islands, moves southwards in winter from its more northern quarters, and about this time also numbers reach England from the continent of Europe, where it has a wide range, while it is likewise found in Africa and Asia.

The Kestrel either takes possession of the deserted nest of a Crow or Magpie, or lays its eggs in a recess in the rocky face of a cliff, or in a hole in the wall of a ruin, and occasionally in a hollow tree. The four, five, or six eggs are closely dappled with various shades of rich reddish-brown, often on a creamy-white ground.

The Kestrel—or Windhover as it is often called, from its method of hanging in the air—hovers head to wind, either motionless or supporting itself with rapid beats of the wings, gliding quickly to another point as soon as it is satisfied that there is no mouse or other prey beneath, and repeating the operation until it finds some unsuspecting quarry on which it drops.

It is one of the least harmful and most useful of our raptorial birds, killing large numbers of mice and voles, as well as beetles and other insects, and although it occasionally takes small birds, its short toes are ill adapted to the capture of feathered prey.

The well-known cry has been syllabled as *klee, klee, klee*.

Very old female birds partially assume the male plumage, and have more or less bluish-grey on the rump and tail. I have shown one of these, in the plate, from Mr. G. E. Lodge's collection, who kindly lent it for the purpose.

THE LESSER KESTREL.

Falco cenchris, Naumann.

PLATE 38.

The visits of this small Falcon are few and far between, the number met with in England amounting to eight, while it has once occurred in Scotland and once in Ireland. It breeds in Southern Europe, from Spain, where it is extremely abundant, eastwards through Western Asia to Bokhara and Persia, and also in North Africa, migrating in winter to tropical and South Africa.

The Lesser Kestrel makes no nest, its eggs, usually four or five and paler in colour than the Common Kestrel's, are placed in holes in rocks, buildings, or ruins.

It lives on insects.

The female resembles that of the common species, but both sexes can be always distinguished from our bird by their white claws.

Order STEGANOPODES.

FAMILY PELECANIDÆ.

THE COMMON CORMORANT.

Phalacrocorax carbo (Linnæus).

PLATE 39.

This bird is plentiful about our rocky coasts, being more common on the north-eastern shores of England and east coast of Scotland than the Shag or Green Cormorant, though the latter predominates in many parts of the west. The Common Cormorant is also widely distributed over Europe, Asia, and America, and even reaches Greenland. The birds usually nest in colonies on high rocks and cliffs by the sea, or occasionally inland on trees.

The nest is constructed of sticks, grass, seaweed, and various odds and ends, and contains from three to five eggs, which are coated with a white chalky substance, overlying the delicate greenish-blue shell. The blind and naked young, when first hatched, are slaty-black in colour.

The Common Cormorant, often called the "Great" or Black Cormorant, feeds on fish, caught with great dexterity, of which it requires a large amount to satisfy its ravenous appetite. The birds have a characteristic habit, when gorged and resting after a meal, of basking on some low rock, where they may be seen in groups, some of the party generally spreading their wings to the sun and wind so that they may dry.

In the plate the Cormorant is shown in nuptial dress, with the white filaments on head and neck, which are shed early in June.

The sexes are alike in colour.



Gannet. (Larus v. v.)

Cormorant. (Phalacrocorax v.)

Shearwater. (Puffinus v.)

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THE SHAG, OR GREEN CORMORANT.

Phalacrocorax graculus (Linnæus).

PLATE 39.

This species, also sometimes called the Crested Cormorant, from the tuft of curved feathers on the crown, worn during the breeding season only, is common in rocky places on our western coasts and islands, and along the western shores of Europe from Norway to Spain and Portugal. It breeds on ledges of rock and among boulders, and often chooses a site within a dark and sea-washed cavern.

The nest is made of bits of turf, seaweed, and other materials, which soon become an evil-smelling mass. The three or four eggs are similar in colour and texture to the Common Cormorant's, and the young likewise are without any down when hatched.

The habits of the Shag, and its mode of catching fish by diving, are like those of the larger bird; and both utter a croaking note.

The male and female do not differ in colour.

THE GANNET.

Sula bassana (Linnæus).

PLATE 39.

The Gannet is found breeding regularly on certain rocks and islands off our coasts, which it leaves as soon as the young are able to fly, while the rest of the year is spent at sea, where it leads a wandering life. In winter it ranges as far south in Europe as the Mediterranean, while to the north its breeding range extends to Iceland, the Faroes, and also to North America.

One of the best known breeding stations in Great Britain is the Bass Rock, off the Haddingtonshire coast, others being Suliserry, some forty miles west of the Orkneys, Suliserry, Outer Hebrides, the St. Kilda Islands, and Ailsa Craig, at the entrance of the Firth of Clyde. Off the Welsh coast there is a breeding station on Grassholm, and two others in Irish waters, viz. the Bull Rock, county Cork, and the Skelligs, county Kerry.

About the end of March or in April the Gannets, or, as they are sometimes called, Solan Geese, collect at their nesting rocks, and construct their nests of seaweed and grassy material, placing them on a ledge or among boulders. The eggs, like those of the Cormorant, are coated with a chalky substance, under which is the pale bluish-green shell, and number three or four. The young when hatched are blind, naked, and slaty-black in colour, but are soon clothed in thick white down.

The fish on which the Gannet lives are obtained by diving, and when occupied in this pursuit the birds follow the shoals, flying at a considerable height and then plunging downwards, at first with the wings held partly open, but on nearing the surface they are folded in just before the water is struck, when a jet of spray is thrown upwards. They only remain below for a few seconds, then rise and resume their fishing.

In the plate a bird in the dark speckled plumage of the first year is shown in the background; this becomes lighter every season until the bird attains maturity, which, according to Howard Saunders, is in its sixth year.

Order HERODIONES.

FAMILY ARDEIDÆ.

THE COMMON HERON.

Ardea cinerea (Linnæus).

PLATE 40.

The Common Heron is resident and widely distributed in the British Islands, being also found over the greater part of Europe, as well as in Africa, Asia, and Madagascar.

It breeds in colonies, and the nests, composed of sticks, with a lining of finer twigs and roots, are usually placed in tall trees or on cliffs, but are sometimes built on the ground.

These heronries, to which the birds return very early in the season, are often used for many years in succession. The three or four eggs are greenish-blue, showing a chalky surface.

The food, for the most part obtained at night, consists of various fish, reptiles, and small mammals.

The bird is extremely shy and wary in its habits; its usual mode of fishing is to stand immovable in some shallow until its unsuspecting prey comes within reach, when with a sudden stroke of the long bill the fish is caught between the mandibles and swallowed.

The cry is loud and harsh, and may often be heard as the birds fly to their feeding grounds in the evening.

The female is rather smaller and duller in colour than the male.



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THE PURPLE HERON.

Ardea purpurea, Linnæus.

PLATE 40.

This handsome species is a rather rare visitor to our islands, some fifty specimens having been recorded at different times, which were mostly immature birds. It has more frequently been taken on the south-eastern coast of England than elsewhere. The Purple Heron is migratory, and frequents during the breeding season those marshy places where there are dense reed-beds, in many parts of Central and Southern Europe, as well as Africa, Asia, and Madagascar. It spends the winter in tropical and Southern Africa.

The nest is generally placed in thick reed-clumps, often on the bent down and matted stems just above the water, and is built of the dead stalks of the same plant and of sedges. The three to five eggs are the same in colour and texture as the Common Heron's, but are smaller.

It is very shy and skulking in its habits, and feeds principally on frogs.

According to Howard Saunders (*Manual of British Birds*), "the note is more guttural than that of its congener."

There is no difference in the colour of the sexes.

THE GREAT WHITE HERON.

Ardea alba, Linnæus.

PLATE 40.

Some seven examples of this beautiful Heron have been recorded in Great Britain, five of these having been obtained in England and two in Scotland. In Europe it haunts the marshes and waters of the south-eastern countries, and is also found in Southern Asia, and seemingly in North Africa.

The nest, placed in reed-thickets or in trees in swampy places, is built of sticks or dead reeds, and contains three or four eggs of a greenish-blue tint.

The bird is sociable in its habits, and its food is similar to the Common Heron's. According to Lord Lilford, in his work on British Birds, it resembles the latter bird in its general habits, "frequenting the open marshes and the margins of rivers and lakes in quest of food during the day and roosting in high trees."

The males are a little larger and have more fully developed dorsal plumes than the females, and both sexes are wantonly destroyed in great numbers, on account of these decorations, known as "Ospreys" in the millinery trade.

THE LITTLE EGRET.

Ardea garzetta, Linnæus.

PLATE 40.

This is an extremely rare visitant to the British Islands, apparently the only reliable record being one got at Countess Weir, on the Exe, Devonshire, on 3rd June 1870. Some others have been recorded as occurring in Yorkshire, Northamptonshire, and Sussex, but doubt has been expressed as to their authenticity. The Little Egret breeds in Southern Europe, as well as in Africa and the warmer parts of Asia; the European birds mostly wintering in Africa.

It breeds in colonies, and builds its nest, which is lightly made of sticks and reeds, in a bush or tree among the swamps; the eggs, usually four in number, are pale bluish-green.

This species is very clamorous and noisy at the breeding stations, the cry being harsh and discordant like that of its congeners, and like them it suffers much at the hands of the plume dealers.

It lives on small fish, reptiles, and water insects, and the sexes are alike in colour.

THE BUFF-BACKED HERON.

Ardea bubulcus, Audouin.

PLATE 40.

A specimen of this Heron was shot in October 1805 near Kingsbridge, Devonshire, the only one which has been obtained in the British Isles.

The Buff-backed Heron breeds in southern Spain, also inhabiting South-west Asia, Africa, and Madagascar.

It breeds among dense reed-beds and on bushes in marshy places, forming large colonies like its allies, and constructs its nest of sticks. The eggs, from three to five in number, are a delicate pale blue in colour.

Its principal food appears to consist of the ticks infesting cattle, and in consequence it may usually be found near the herds, but it also feeds on grasshoppers and other insects.

Its notes are harsh like those of other Herons.

In the autumn the buff-coloured plumes are moulted, and are not again assumed till the following spring. In the female these are less developed, and she is smaller than the male.

END OF VOL. II.

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